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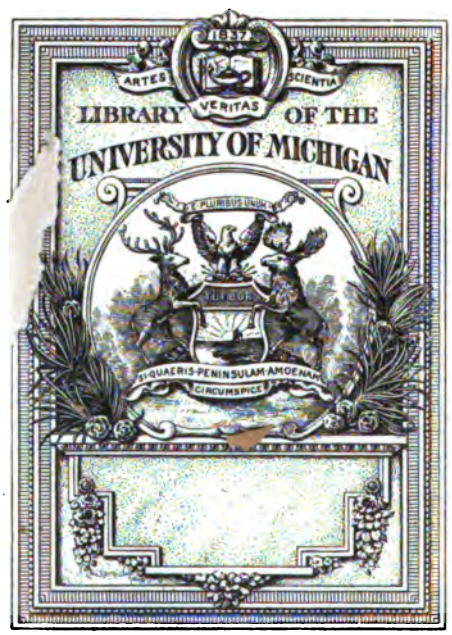
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COMMERCIAL RELATIONS OF THE UNITED STATES.

REPORTS

FROM THE

CONSULS OF THE UNITED STATES

ON THE

COMMERCE, MANUFACTURES, ETC.,

OF THEIR

CONSULAR DISTRICTS.

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CONSULAR REPORTS

ON

COMMERCE, MANUFACTURES, ETC.

MAY, 1882.

WAGES AND FOOD PRICES IN GERMANY.

REPORT BY CONSUL-GENERAL VOGELER.

The great problem which confronts American statesmen at the present time is the adjustment of the relations between capital and labor.

To foster home industries without creating great monopolies at the expense of the consumers; to protect the workingman without crippling the industries and retarding the commercial progress of the United States, is the problem of the hour.

In the discussion of this question the condition of the workingmen as to wages paid and the cost of living in the different commercial countries becomes vitally important.

In view of this fact I have been at pains to obtain such information with reference to the wages paid and the cost of living in Germany as will enable those interested in the study of these questions to arrive at a measurably accurate estimate of the condition of the workingmen and artisans of Germany as compared with those of the United States.

The fact that thousands of workingmen of German birth are already residents and citizens of the United States, and that their number is being increased by immigration at a stupendous rate, gives to the comparison suggested a most vital and practical interest.

In the subjoined table I give the average wages paid to fourteen different classes of workingmen and artisans in thirty leading and representative cities of the German Empire, together with the prices of the principal articles of food and the rental of such dwellings as the workingmen of this country usually occupy.

These figures are obtained from very reliable private sources, and while no unfailing accuracy is claimed for each particular one of them, they are as nearly correct as the most painstaking research could make them.

I could have given in each instance the hours of work per day, but I

found them to be so nearly uniform that I concluded not to complicate the table by inserting the figures.

The average time of work per day in Germany is nearly, if not exactly, ten hours, varying, of course, slightly with the seasons.

When it is considered that four persons are expected to get a month's food-supply for $9.50, rent, light, taxes, and clothing not included, the chances of the workingman saving any part of his earnings in this country are very limited indeed.

FERDINAND VOGELER,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
Frankfort-on-the-Main, April 24, 1882.

WAGES AND FOOD PRICES IN GERMANY.

Statement showing the rates of wages and the prices of the necessaries of life in thirty of the chief cities of Germany, on January 1, 1882.

1.—RATES OF WAGES.

[Wages per week.]

City and state.	BUILDERS.			Cabinet-makers.	Locksmiths.	Tailors.	Shoemakers.	Machinists.	Machine-weavers.	Wool-spinners.	Other skilled factory men.	DAY LABORERS.		
	Foremen.	Journeymen.	Hod-carriers.									Factory.	Garden.	Field.
Apolda, Saxony	$4 32	$3 12	$1 92	$2 64	$2 88	$2 40	$2 40	.....	$2 88	$2 88	$2 88	$2 16	$2 16	$2 16
Augsburg, Bavaria	6 48	4 56	2 76	3 96	3 96	3 00	3 24	.....	.....	.....	4 20	2 59	3 24	2 64
Barmen, Prussia	4 56	3 60	2 88	3 60	4 32	3 60	3 60	.....	.....	.....	.....	.....	2 16	2 16
Berlin, Prussia	5 04	4 32	3 12	4 32	3 72	3 84	3 60	.....	.....	.....	5 52	3 60	.....	.....
Bremen	5 76	3 60	2 64	3 84	3 36	3 36	2 88	$3 84	.....	.....	3 84	3 36	2 64	2 40
Cologne, Prussia	4 32	3 60	2 88	4 32	4 32	3 60	3 60	.....	.....	.....	4 32	3 36	2 88	2 88
Dantzig, Prussia	5 04	3 60	1 68	2 88	3 24	2 88	1 92	.....	.....	.....	2 88	2 52	2 16	1 44
Darmstadt, Hesse	3 60	2 88	2 40	2 88	2 88	2 40	2 88	.....	.....	.....	.....	2 88	2 16	2 16
Dortmund, Prussia	5 04	3 60	2 88	3 60	3 60	3 60	3 60	.....	.....	.....	3 60	2 88	.....	.....
Dresden, Saxony	4 68	3 43	2 76	3 24	3 60	3 24	3 24	.....	.....	.....	3 24	.....	2 76	.....
Elberfeld, Prussia	3 96	3 48	2 52	3 72	3 60	3 60	3 60	.....	3 24	.....	3 84	3 24	.....	.....
Ettlingen, Baden	4 32	3 60	1 92	4 32	4 32	.....	.....	.....	3 60	3 84	3 84	2 88	.....	.....
Frankfort-on-the-Main, Prussia	7 40	5 04	3 74	4 58	4 85	4 56	3 84	.....	.....	.....	5 02	3 50	.....	.....
Heidelberg, Baden	5 04	3 31	3 02	3 60	3 60	3 60	.....	.....	.....	.....	3 10	.....	.....	.....
Hof, Bavaria	.....	2 40	1 92	2 16	2 16	1 92	2 40	.....	2 40	4 56	2 16	2 16	.....	.....
Iserlohn, Prussia	5 76	3 60	3 24	3 84	3 60	3 60	3 60	.....	.....	.....	.....	3 24	2 88	2 88
Königsberg, Prussia	6 48	4 32	2 88	4 32	3 24	3 60	3 24	3 60	.....	.....	.....	.....	.....	.....
Leipzig, Saxony	4 32	3 60	2 64	3 84	3 60	3 60	3 60	.....	.....	6 00	3 96	3 24	2 40	2 16
Magdeburg, Prussia	4 32	3 60	2 88	4 15	4 15	2 64	2 64	4 80	.....	.....	4 68	2 88	2 88	2 88
Mülheim-on-the-Rhine, Prussia	4 80	3 60	2 88	3 60	3 60	3 60	2 88	.....	2 59	.....	4 61	3 96	2 95	2 40
Nuremberg, Bavaria	5 28	4 32	2 64	3 24	3 48	.....	.....	.....	.....	.....	.....	3 02	3 02	3 02
Offenburg, Baden	4 80	2 40	1 44	2 16	2 16	1 80	1 80	.....	.....	.....	3 38	2 88	2 16	1 68
Pforzheim, Baden	4 32	3 46	2 59	4 32	3 46	.....	.....	.....	.....	.....	.....	.....	.....	.....
Remscheid, Prussia	4 92	3 96	3 24	4 56	4 68	3 60	3 60	5 76	.....	.....	5 04	3 96	4 08	3 96
Reutlingen, Wurtemberg	4 32	2 88	2 16	3 84	4 08	4 08	4 08	.....	.....	.....	4 32	.....	.....	3 12
Schweinfurt, Bavaria	5 76	2 88	2 30	3 84	3 84	4 20	4 20	.....	.....	.....	3 84	3 17	2 88	2 28

City and state.	BUILDERS.			DAY LABORERS.			Other skilled factory men.	Machine-weavers.	Machinists.	Shoemakers.	Tailors.	Locksmiths.	Cabinet-makers.	Hod-carriers.	Journeymen.	Foremen.
	Foremen.	Journeymen.	Hod-carriers.	Factory.	Garden.	Field.										
Stralsund, Prussia	$3 60	$2 52	$1 80	$2 88	$2 16	$2 16	$3 60			$2 88	2 88	$2 88	$2 88	$1 80	$2 52	$3 60
Strassburg, Alsace	7 20	4 32	2 88	3 53	.....	.....	5 76			3 12	3 60	4 32	4 08	2 88	4 32	7 20
Wesel, Prussia	3 96	3 24	2 88	2 88	.....	.....	3 96			3 24	3 60	3 24	3 24	2 88	3 24	3 96
Worms, Hesse	4 32	3 12	1 52	2 88	2 64	2 40	3 96			2 64	2 88	3 60	3 12	1 52	3 12	4 32
Average	4 96	3 53	2 57	3 04	2 68	2 46	3 98	4 42	$4 80	3 17	3 68	3 61	3 62	2 57	3 53	4 96

2.—FOOD PRICES AND RENT.

Cities and states.	Food prices.							Rents, per month.	
	Rye flour, per 100 pounds.	Wheat flour, per 100 pounds.	Potatoes, per 100 pounds.	Beef, per pound.	Pork, per pound.	Mutton, per pound.	Bacon, per pound.	Two rooms and kitchen.	Three rooms and kitchen.
Apolda, Saxony	.....	$4 32	$0 59	$0 13	$0 14	$0 12	$0 33	.....	.....
Augsburg, Bavaria	$3 78	5 07	71	11½	13½	10	19½	$2 40	$4 12
Barmen, Prussia	4 32	4 32	75	11	17	8	17	.....	4 36
Berlin, Prussia	3 24	4 32	59	14	16	14½	17	2 82	5 24
Bremen	4 32	4 32	49	16	16	.....	16	.....	4 32
Cologne, Prussia	4 32	4 75	75	14	17	16	17	.....	.....
Dantzig, Prussia	4 10	4 64	41	10½	10½	12½	18½	.....	.....
Darmstadt, Hesse	.....	6 05	53	14	14	11	22	2 15	3 85
Dortmund, Prussia	2 59	2 89	1 39	14½	17	13	18	.....	.....
Dresden, Saxony	2 38	4 10	77	16	14½	14	15	.....	.....
Elberfeld, Prussia	.....	4 97	67	11½	17	10½	18	.....	.....
Ettlingen, Baden	5 07	5 94	43	13	14	14½	17	2 05	3 70
Frankfort-on-the-Main, Prussia	3 58	4 53	48	14½	17	13	19½	3 10	5 32
Heidelberg, Baden	3 24	4 97	53	14	14	14½	17	.....	.....
Hof, Bavaria	2 81	3 46	48	13	13	11	17	.....	.....
Iserlohn, Prussia	3 02	4 32	65	13	14	11	17	.....	.....
Königsberg, Prussia	3 46	3 89	53	11	13	10	14½	.....	.....
Leipzig, Saxony	4 32	5 40	59	14½	14½	13	19	.....	3 36
Magdeburg, Prussia	3 58	4 86	51	14	13½	11½	18	2 71	5 11
Mülheim-on-the-Rhine, Prussia	2 59	4 32	65	13	16	13	17	.....	.....
Nuremberg, Bavaria	3 78	5 40	53	14	14	10½	17	2 10	3 70
Offenburg, Baden	3 67	4 97	58	13	14	13	22	.....	.....
Pforzheim, Baden	.....	.....	67	13	14	13	.....	1 90	3 60
Remscheid, Prussia	3 46	3 89	86	14	16	14	17	.....	.....
Reutlingen, Wurtemberg	.....	4 21	47	12½	14½	7½	19½	.....	.....
Schweinfurt, Bavaria	3 46	5 07	53	13	13	13	20	.....	3 50
Stralsund, Prussia	3 89	4 32	51	13	14	11	22	.....	.....
Strassburg, Alsace	4 32	5 61	51	14	14	14	21½	1 92	3 60
Wesel, Prussia	4 53	4 10	57	14½	15	14	19½	.....	3 60
Worms, Hesse	2 38	3 46	53	14	13	8½	17	.....	.....
Average	3 60	4 60	61	13	15	12	19	2 35	4 10

AMERICAN COTTON GOODS IN CHINA.

REPORT BY CONSUL-GENERAL DENNY, OF SHANGHAI.

On account of the peaceful and prosperous condition of the empire, it was predicted early in the year just closed that the trade in cotton goods would be larger than the result has shown it to have been. Of course in this respect the American trade shares whatever disappointment there is. At the same time there is really no good cause for complaint on the part of our manufacturers, for the figures show this trade to be not only upon a sound and healthy basis, but there has been an increase of sales for 1881 of 1,500 bales over the previous year, as will appear from the following table furnished me by Russell & Co:

Sales of American domestics in Shanghai for 1880 *and* 1881.

Articles.	1881.	1881.
	Bales.	*Bales.*
Drills	18,529	26,203
Sheetings	28,098	22,559
Jeans	2,470	1,825
Canton flannel	65	75
Total	49,162	50,662

These figures show an increase in drills and flannels of 7,684 bales, while sheetings and jeans show a decrease of 6,184 bales.

The stock on hand January 1, 1882, was: Drills, 2,880 bales; sheetings, 6,839 bales; and jeans, 180 bales, or in all, 9,899 bales. While the stock carried over necessarily affects the year's importations, yet the increase or decrease of trade is always determined by the amount of sales during the year. The falling off in sheetings and jeans is attributed to the fact that for the last two years home prices have been so good that our manufacturers have become comparatively indifferent to the export trade. However this may be, it is certain that if they could have continued to supply this market at prices ruling three years ago the trade would be considerably in advance of what it is now. Of course it is perfectly natural for them to keep their eyes in the direction that gives them the best returns.

At the same time the happening of a contingency which distracts their minds from this market, if only for the time being, is to be regretted, for they have here worthy rivals; those who are looking to the future, and who fully understand the importance of keeping what they have, and getting all they can, and whenever the zealous attention of the American manufacturers is withdrawn from their interests in this quarter they lose an advantage which is difficult to regain. While, on the other hand, if they will only keep in view the market, study its demands, and continue to maintain the present high standard of their manufactures, leaving others to supply the trade in adulterated goods, their share in the future of this trade is sure to be an enviable one.

I will close by quoting from a retrospect of the piece-goods trade in

China for the past year, issued by Mr. P. Maclean, of Shanghai, wherein he pays our manufacturers a high compliment. He says:

The sound and faithful character of the American manufacture has enabled the importers to be fairly firm and resolute throughout the year, and it becomes more and more evident that the Chinese consumer is fairly alive to the fact that a good, sound cloth is cheaper in the long run than a filled, although nominally cheap, manufacture The American manufacturers are to be congratulated on the steady manner in which they have abstained from reducing the cost of their productions by the introduction of sizing into the cloth, and it is becoming more and more evident that the English maker will have to follow their example if he means to keep in the field. There will necessarily always be a demand for cheap cloth, but this is only an item, not the whole trade.

Concerning drillings, he remarks as follows:

There have been several prominent features in the trade under this heading, and one of the most important has been the almost complete cessation in the demand for the ordinary quality of 14-pound English cloth. Up to the end of May, or even into June, all went fairly well, and the native dealers bought largely, to some extent, on speculation. After that date prices began to decline, and by and by it began to be apparent that the question was not so much one of price as entire want of desire to purchase.

An offer once refused was rarely repeated, and so things went from bad to worse until a point was reached at which ordinary 14-pound English drills never stood before.

Many reasons are given for this. May not the real one be found in the gradual lowering of make and pick, and the free use of size? The natives aver this to be the true one. The better classes, beyond the common to ordinary makes, have not suffered so much, and again there has been a much larger business done than ever in fine English drills packed in the American fashion, which have sold readily all throughout. Whether the prices have been remunerative to the importers is known only to themselves, but the standard of the cloth has been well maintained, and the article bids fair to compete with its better known American rival.

An indorsement so complete as the foregoing is all the more flattering when it comes from a man like Mr. Maclean, whose reports are always valuable for the comprehensive statistics they contain, accompanied as they are with intelligent criticisms.

O. N. DENNY,
Consul-General.

UNITED STATES CONSULATE GENERAL,
Shanghai, February 23, 1882.

THE PANAMA AND SUEZ ROUTES TO CHINA.

REPORT BY CONSUL-GENERAL DENNY, OF SHANGHAI.

As predicted in my No. 169, wherein the advantages of the two routes, Panama and Suez, were compared, the former continues to grow in favor with New York shippers.

From the 1st of March last to the 1st of this month (February) the shipments of the cotton goods by these routes have been as follows:

Via Panama and San Francisco:

Drills, 23,843 bales; 357,645 pieces.
Sheetings, 18,766 bales; 375,320 pieces.
Jeans, 25 bales; 500 pieces.

Via Suez Canal:

Drills, 6,884 bales; 103,260 pieces.

Sheetings, 6,043 bales; 120,860 pieces.
Jeans, 1,212 bales; 24,240 pieces.
By Panama route:
Total, 42,634 bales; 733,465 pieces.
By Suez Canal:
Total, 14,139 bales; 248,369 pieces.
By both routes, 56,773 bales; 981,825 pieces.

The difference in favor of the Panama route would have been even greater had the carrying capacity of the steamers from New York to San Francisco been equal to the demands of shippers, but for this reason, if for no other, they were compelled to forward the over cargo by Suez. As before observed, the cottons arriving by Panama and San Francisco continue to come in better condition than by the other route, the bales looking much brighter, and being less chafed and stained. The goods appear to be well packed. At least no complaints on this score are made by the merchants here that I am aware of. The damage to the bales from chafage is the result of improper stowage, and for which the steamship companies should be held responsible.

O. N. DENNY,
Consul-General.

UNITED STATES CONSULATE GENERAL,
Shanghai, February 14, 1882.

KEROSENE OIL IN CHINA.

REPORT BY CONSUL-GENERAL DENNY, OF SHANGHAI.

Kerosene oil shows a prominent part of the imports into this country from the United States, and it is satisfactory to observe from the statistics below that this branch of our trade with China is increasing each year. Being a much cheaper oil, and producing a more brilliant light than the native article, it is but natural to suppose that it will at no distant day take the place of the latter, to no small extent, especially at the treaty ports and places in close proximity to them.

It is estimated that at least one home out of every six in the native city of Shanghai now uses kerosene in preference to native oil, and in the foreign settlements it is more extensively consumed by most classes of Chinese.

As I have remarked in my previous observations upon the trade in kerosene oil, there is more or less opposition to its extended development on the part of the manufacturers of the native article, which is not to be wondered at in view of the fact that their interests have been materially affected since its introduction into China; and in some places I understand that influence has been brought to bear on the local officials to use their exertions to discourage the use of this oil, but their efforts in this direction cannot have materially impaired the trade—a proof of this fact the statistics at the foot show—the deliveries during the year 1881, as compared with 1878, having increased about threefold.

Kerosene oil burns much longer and is about one-third cheaper than the native kind.

There are eight vessels on their way to this port with cargoes of kerosene, aggregating 250,000 cases, a considerable portion of which I understand has been sold "to arrive."

The following is a comparative statement of deliveries of kerosine oil for consumption in Shanghai from 1878 to 1881, inclusive:

Year.	Average per month.	Total per year.
	Cases.	*Cases.*
1878	14,492	173,707
1879	24,913	289,952
1880	32,118	385,416
1881	35,913	430,962

In Japan the consumption of this oil is much larger, the deliveries in 1881 being more than three times the quantity used here. Three steamers are expected to arrive there shortly from New York with about 133,000 cases, of which quantity I am informed a large portion has changed hands.

I have been furnished with the following statistics of the consumption of kerosene oil in Japan, which may prove interesting.

In 1878 there were 1,068,132 cases consumed; in 1879, 1,177,664 cases; in 1880, 1,244,507 cases; and in 1881, 1,497,873 cases.

O. N. DENNY,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
Shanghai, March 6, 1882.

AMERICAN OIL IN THE ARGENTINE REPUBLIC.

REPORT BY CONSUL BAKER, OF BUENOS AYRES.

My attention has been called to a paragraph published recently in an American journal, in regard to the present overproduction of petroleum in the United States, there being, it is said, millions of barrels of crude oil, "enough, indeed, to supply the world for years," stowed away in the oil regions of Pennsylvania. The article goes on to say that "the condition of the market and the amount of surplus have caused the oil men to turn their attention to South America, and to endeavor to devise some plan for making a market there," &c.

I am not able to speak for the other countries of South America, but so far as the Argentine Republic is concerned, it may be well enough for me to assure the Department that for many years there has been a constant market and a steady demand for American oils here, and that the importation of kerosene from the United States is one of the largest items of our trade with the River Plate. By a reference to the statistics of foreign commerce of the Argentine Republic,* it appears that the receipts of kerosene for the last five years were as follows:

Importations of kerosene for the last five years.

Years.	Quantity.	Official value.
	Liters.	
1876	3,364,225	$280,069
1877	4,814,557	462,336
1878	4,639,026	414,599
1879	4,279,779	428,333
1880	5,595,651	400,414

*Estadistrias del comercio exterive de la Republica Argentina correspondientes a los años, 1876–1880.

The returns show that nearly all of this came from the United States, either directly or indirectly. The following are the exact figures from all countries for 1880:

Importations of kerosene into the Argentine Republic for the year 1880.

Where from.	Quantity.	Official value.
	Liters.	
Germany	1,630	$130
Chili	140	12
Spain	3,610	289
Uruguay	315,097	25,339
United States	4,876,029	342,922
England	1,710	126
Unknown	397,454	31,586
Total	5,595,651	400,414

The above receipts put down to Uruguay and "unknown" were really from the United States. The importations for 1880 were generally distributed throughout the interior of the Argentine Republic, the following table showing the importations by custom-houses:

Importations of kerosene into the Argentine Republic by custom-houses for 1880.

Custom-house.	Quantity.	Official value.
	Liters.	
Buenos Ayres	4,750,629	$332,890
Concordia	41,609	2,985
Corrientes	15,613	1,235
Goya	9,490	782
Gualequay	44,802	3,555
Gualequaychá	59,664	4,936
La Victoria	14,889	1,429
Paraná	42,928	3,342
Paso de los Libres	9,150	731
Rosario	556,978	44,565
Santa Fe	22,850	1,828
San Juan	141	12
San Nicholás	14,440	1,156
Uruguay	12,446	968
Total	5,595,651	400,414

For the year 1881 I have not been able yet to obtain the official returns from the statistical office, but the amount will be fully equal to that of the previous year.

The market here for kerosene is generally steady and strong, owing to the demand for the article in the interior for illuminating purposes. Occasionally the deposits have been overstocked, owing to heavy arrivals, but being of prime necessity, it generally does not wait long for customers.

The Argentine tariff on kerosene, naphtha, and petroleum is 25 per cent. on the official value, which for the present year is fixed at seven cents per liter, to which duty is to be added one per cent. additional.

Besides kerosene for illuminating and lubricating purposes, other products of petroleum, such as vaseline, valvoline, luxer, vaseline soaps, vaseline pomade, vaseline cold cream, &c., also find a ready sale, and are very popular in this market.

I do not know that any demand exists here for the crude petroleum, for the reason that the Argentine Republic is not a manufacturing

country, and there is no great call for it in the arts and trade, and I suppose it could not be put down in this market cheap enough to be used as a fuel or steam generator.

E. L. BAKER,
Consul.

UNITED STATES CONSULATE,
Buenos Ayres, March 4, 1882.

PETROLEUM DEPOSITS IN THE ARGENTINE REPUBLIC.

REPORT BY CONSUL BAKER, OF BUENOS AYRES.

In the upper provinces of the Argentine Republic there have lately been discovered petroleum deposits, apparently of great richness and extent; and it is believed that the eastern slopes of the *sierras* of the Andes are underlaid in many places with this mineral oil. As yet none of them have been properly surveyed, owing to their remoteness from the usual lines of travel, and their inaccessibility to present center of population. There are no railways at present anywhere near them, and they can scarcely yet be reached even by bullock carts.

A lake of oil in the province of Jujuy.

One of these deposits is located in the province of Jujuy. It consists of a lake of about eighty-eight acres (22 Argentine cuadros) in extent, and of unknown depth, and is covered with a cap of asphalt. The liquid itself is somewhat thick, is of a black color and has no disagreeable odor. For the information of the oil men of the United States I have obtained an analysis of the liquid, made by Prof. J. J. Kyle, of the University of Buenos Ayres. It appears that 100 liters of the petroleum distilled to carbonization of the residue gave 90 liters of oil of 861 specific gravity, and 10 kilograms of coke. These 90 liters of oil gave the following result:

	Liters.
Naphtha, 740 specific gravity	6
Kerosene, 827 specific gravity	34
Dense oils, 900 specific gravity	50
Total	100

The analysis was classed as follows: As naphtha, all the product distilled up to 150°, and whose specific gravity did not exceed 740; as kerosene, all the product distilled between 150° and 280° and with an average specific gravity of .830; as dense oils, all the product distilled above 280°, and with a specific gravity above .830.

Of the kerosene thus eliminated, 100 parts was then rectified, losing 5 per cent. of its volume in dense oils, &c., giving the following result:

Naphtha, .740 specific gravity	6
Kerosene, .814 specific gravity	29
Dense oils	53
Coke	10
Gas	2
Total	100

I have before me several analyses of the oils of Pennsylvania, Canada, California, Rangoon, Africa (Red Sea), &c., and this compares very favorably with most of them. I would add that the Jujuy kerosene is without disagreeable odor, and will not inflame below 55° centigrade.

It is colorless and is pronounced equal to the best that comes to this market from the United States.

Oil springs of the province of Mendoza.

Deposits of petroleum have also been recently discovered in the province of Mendoza. One of those is only about ten or twelve leagues southwest from the old site of the city of Mendoza, destroyed by an earthquake in 1861. It is reached by a very good wagon road. Messrs. Campbell & Co., an English firm, have obtained a concession from the government for working these deposits. I am told that, according to assays made in Europe, most excellent results were obtained. I have not been able to obtain the analysis, but the yield is stated to be nearly 40 per cent. of kerosene. What adds to its importance is the fact that the oil flows to the surface and thus offers a constant supply of the crude petroleum.

Another similar deposit has been discovered about twelve leagues north of the present city of Mendoza; but I have not yet obtained particulars in regard to its prospects.

But a still more important deposit than either of these is found in the same province, about eighty leagues south of Mendoza. Like that of Jujuy, it is an extended lake of the oil, the cap also being asphalt, covering a large surface and offering the petroleum, almost without expense, in quantities which, according to reports, are almost fabulous. By analysis it has been found to yield about 40 per cent. of pure oil. So great is the appreciation of this great source of wealth to the country that a scheme has recently been proposed for a railway from Buenos Ayres, running through this oil region to Chili; and parties in the United States have been approached in regard to it. But I doubt, as a concession for such a railway by another route has already been granted, if the scheme will at present be successful. The oil region, however, is so near the route of the Great Trans-Andine Railroad, now rapidly being constructed, and which is already finished to San Luis, that a branch could very readily be built to penetrate this immense deposit of petroleum.

It will be years, however, before this can be accomplished; and, meanwhile the petroleum beds of the Argentine Republic must remain so remote from market and centers of population, that the trade of the United States has nothing to fear from any present competition with these oils of the upper provinces.

E. L. BAKER,
Consul.

CONSULATE OF THE UNITED STATES,
Buenos Ayres, March 4, 1882.

ADULTERATION OF AMERICAN COTTON.

REPORT BY CONSUL COOPER, OF GOTHENBURG, SWEDEN.

On the 11th day of January, of the current year, Messrs. Gibson & Sons, cotton factors of the highest respectability and standing in Gottenburg, made formal complaint to me that they had suffered heavy loss from swindling practices in the matter of packing cotton received from the United States. I gave the matter my immediate attention, and after a personal inspection of the cotton complained of, telegraphed

briefly on the same day to the honorable the Secretary of the Treasury, announcing the simple fact of the fraudulent shipments. This action on my part was supplemented directly by a dispatch in writing to the honorable the Secretary of the Treasury, as follows:

UNITED STATES CONSULATE,
Gothenburg, January 11, 1882.

SIR: I have the honor to transmit herewith a copy of the declaration of the consignees, and also a copy of the invoice of a quantity of cotton recently received, by Messrs. Gibson & Sons, of Gottenburg, from Charleston, in the United States. I beg to say for your information that the Messrs. Gibson are merchants of the highest standing and integrity, and that the originals of these inclosures have been delivered to the Messrs. Gibson to be forwarded at their pleasure to their agent in New York.

It will be apparent to you upon examining their declaration that a gross fraud has been perpetrated in the packing of the cotton described therein. A careful personal inspection, which I have made at the request of the consignees, shows that large quantities of sand and small pebbles have been adroitly distributed throughout the merchantable bales.

In the interest of justice, and in order to prevent these outrageous practices, I have deemed it my duty to call your attention to the matter for such action as, in the premises, may be deemed advisable.

I am, sir, your obedient servant,

SIDNEY W. COOPER,
Consul.

HON. SECRETARY OF THE TREASURY.

My letter was promptly forwarded to the honorable the Secretary of the Treasury, and its receipt was duly acknowledged by that official. I was informed that the action of the department upon its subject-matter would be communicated to me.

The frauds complained of have not entirely ceased, and I beg most respectfully to inform the Department of State that it is quite idle for a consul of the United States, at least in Sweden, to attempt to make a market for American goods until American merchants learn to practice common honesty. In saying this, I have in mind not only the fraudulently packed and unmerchantable cotton above alluded to, but also other articles of American merchandise, in which a paying business was done for a few months after they were introduced, during which period commodities of the first class were offered to Swedish consumers, and then, the market established, a degeneration of one sort or another occurred, until the demand ceased altogether.

SIDNEY W. COOPER,
Consul.

UNITED STATES CONSULATE,
Gothenburg, Sweden, March 10, 1882.

EXPORTS FROM THE RIVER PLATE TO THE UNITED STATES.

REPORT BY CONSUL BAKER, OF BUENOS AYRES.

In a report to the Department of State, dated February 23, 1881, published in No. 8 of Commercial Reports,* I gave the exports to the United States from the "River Plate," *i. e.*, that part of South America drained by the Rio de la Plata, for the year 1880. It included the Argentine Republic, Uruguay, and Paraguay, though there are no direct shipments

* Page 839 *et seq.*

from the latter country. The total shipments amounted to $11,451,060.69, of which $5,456,891.62 came from Uruguay, and $5,994,169.07 from the Argentine Republic.

I now give tables of the shipments from the River Plate for the year ending December 31, 1881. They have been compiled from reports of the exports declared at the consulates of Montevideo, Paysandu, Rosario, and Buenos Ayres, for the first three of which I am indebted to the courtesy of the United States consuls at those places, respectively. They show not only the amount but the declared value of each article at the port of departure:

Shipments from the river Plate to the United States during the year 1881.

Articles.	Republic of Uruguay.				Argentine Republic.				Total shipments from the River Plate.	
	Montevideo.		Paysander.*		Rosario.		Buenos Ayres.			
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
Dry ox and cow hides.....number..	1,259,343	$4,336,429 42	.....	.....	61,643	$205,323 76	754,098	$2,764,896 71	2,075,087	$7,306,649 89
Salted ox and cow hides.....do ...	64,871	368,773 99	.....	.....	.....	.....	22,916	127,860 41	87,787	496,634 40
Horse-hair.....bales..	460	115,501 22	.....	.....	920	186,288 59	736	157,901 49	2,116	459,691 30
Goat-skins.....do....	45	19,607 67	.....	.....	1,049	417,657 29	328	136,611 85	1,422	573,876 81
Nutria-skins.....do....	31	10,752 52	.....	.....	4	1,556 49	583	177,632 75	618	189,941 76
Feathers.....cases..	45	28,979 99	.....	.....	.....	.....	165	74,530 27	210	103,510 26
Carpincho-skins.....bales..	4	272 49	.....	.....	.....	.....	.....	.....	4	44,240 08
Carpincho-skins.....number..	.....	.....	.....	.....	423	524 70	35,377	43,422 89	35,800	
Wool.....bales..	4,853	815,969 99	.....	.....	8,812	1,123,206 52	1,418	258,791 09	15,083	2,197,967 60
Deer-skins.....do....	4	1,225 93	.....	.....	.....	.....	16	18,757 71	20	20,151 36
Stag-skins.....number..	.....	.....	.....	.....	83	167 72	5,763		5,819	
Sheep-skins.....bales..	5	1,003 21	.....	.....	8	561 18	97	13,487 28	13	15,051 67
Hide cuttings.....do ...	594	20,486 52	.....	.....	217	5,160 54	405	15,651 45	1,216	41,298 51
Old iron.....tons..	.....	.....	.....	.....	167	1,382 19	1,229½	19,796 02	1,407½	21,178 21
Horse-hides.....number..	.....	.....	.....	.....	60	73 90	6,396	8,742 20	6,456	8,816 10
Calf-skins.....bales..	128	21,521 20	.....	.....	.....	.....	46	3,873 00	174	25,394 20
Chinchilla-skins.....cases..	2	1,344 00	.....	.....	.....	.....	3	2,862 56	7	4,206 56
Bird-skins.....do....	.....	.....	.....	.....	.....	.....	17	475 44	17	475 44
Rags and paper stock.....bags..	.....	.....	.....	.....	.....	.....	33	688 08	33	688 08
Horns.....number..	65,479	5,292 39	.....	.....	.....	.....	56,206	2,671 11	121,685	7,963 50
Horn piths.....tons..	100	2,193 98	.....	.....	.....	.....	.....	.....	100	2,193 98
Bone and bone ash.....do....	4,566	89,180 41	10,461	$209,226 24	3,038	71,688 98	3,426½	77,348 01	21,491½	447,443 64
Dried blood.....bags..	.....	.....	.....	.....	.....	.....	1,621	4,927 04	1,621	4,927 04
Sinews, &c.....bales..	68	2,726 43	.....	.....	.....	.....	.....	.....	68	2,726 43
Fish-tails.....bags..	15	1,044 89	.....	.....	.....	.....	.....	.....	15	1,044 89
Sundries.....	.....	2,835 43	.....	.....	.....	295,98	.....	1,878 31	.....	5,009 77
Total value.....	.....	5,845,142 13	.....	209,226 24	.....	2,013,887 84	.....	3,912,805 67	.....	11,981,061 88

*NOTE.—The exact quantity of bones and bone-ash from Paysandu was not furnished me, and I have estimated it at the average value of the articles per ton. A few hides, number not given, are also included in the amount.

A comparison of these figures with those of 1880 shows the following:

1st. That the exports from the River Plate still in great part consist of hides and wool, and the animal products of the country.

2d. That the total value of the shipments to the United States during the year 1881 amounted to $11,981,061.88, being an increase of $530,201.19 over that of the previous year.

3d. That from Montevideo were shipped 347,675 more hides, 44 more bales of goat skins, 12 more bales of nutrias, 21 more cases of ostrich feathers, and 58,595 more horns, &c., than last year, while there was a falling off of 5,238 bales in the wool exports, the total value of the exports from that port being $530,545.11 greater than in 1880.

4th. That the exports from Paysander consisted entirely of bones and bone-ash, the exports of which were 5,394 tons, and the total value $66,932.24 more than in the previous year.

5th. That from Rosario there were shipped 28,595 more hides, 403 more bales of horse-hair, and a general increase in other articles except wool; the total value of the exports being $277,425.52 greater than that of the previous year.

6th. That from Buenos Ayres there has been a general falling off in the exports of nearly every article, the total exports being $344,900.68 less than in 1880.

7th. That the total shipments to the United States from the republic of Uruguay amounted to $6,054.368.37, being an increase of $597,476.75 over the figures of 1880, while the total shipments from the Argentine Republic amounted to $5,926,693.51, being a decrease of $67,475.56 on the figures of the previous year; and further, that the total shipments from Uruguay were $127,674.86 greater than those from the Argentine Republic; whereas in 1880 those from the latter country exceeded those from the former by $537,275.44.

I may add that while heretofore a large proportion of the wools shipped from the River Plate to the United States have been the coarse carpet wools of Cordova, during the last year considerable amounts of merino and other fine wools went forward, though the total shipments for the year are 6,761 bales less than for 1880.

In regard to ox and cow hides, the preference among dealers in the United States heretofore noticed for Montevidean hides over those from Buenos Ayres has been more marked during the last year than ever before, owing to their greater freedom from cuts, stabs, and slips which mutilate those from this side the river from want of care in removing the hides from the animals. Indeed, the reckless manner in which the gauchos skin the animals in the Argentine Republic is at length attracting the attention of the authorities as well as of the "Bolsa." To remedy the matter if possible, a meeting was recently held by the produce consignees in this city, at which it was resolved to name a committee whose duty, in connection with the judge of the corrales, should be to inspect the daily operation of skinning at the *mataderos* (slaughter-houses) and to impose a penalty on those who willfully or carelessly cut the hides. This measure has been adopted in consequence of the increasing reluctance of produce exporters to buy badly-skinned hides.

There are no special features of the export trade from the River Plate to the United States during the last year worthy of notice, except that it was generally languid and not as profitable as usual to those engaged in it, the ruling prices here being so high as to leave little or no margin on shipments to the United States.

E. L. BAKER, *Consul.*

UNITED STATES CONSULATE,
Buenos Ayres, February 28, 1882.

BRITISH STEAM VS. AMERICAN SAIL.

REPORT BY CONSUL STUDER, OF SINGAPORE.

I have the honor to draw your attention to the following subject, of grave importance to owners of American vessels.

As long as I have been here, and for many years before I came here, the coals needed here for steam navigation, immense supplies, and steadily increasing, were brought from the ports of Cardiff, Liverpool, Sunderland, Shields, &c., by sailing vessels, among which a goodly proportion were American vessels, being, as I have been often told, preferred. These vessels, after discharging cargo, found charters, either here or in neighboring colonies, to load for the United States or for Europe. The quarterly abstracts from this consulate, of the arrivals and departures of American vessels show all this conclusively.

Comparatively few American vessels, among all that came to this port, had cargoes of petroleum, about the only article of export of preponderating importance from the United States to this part of the world; and a very few came in ballast from other ports.

The aforesaid coal trade, then, was of great importance to American vessels, to be profitably employed. True, the freight earned by bringing coal from England to Singapore, on an average only about £1 5*s.* per ton, was not high, but it paid expenses and a little over in case of good passages, and the vessels expected to, and did for many years, earn good freights on return cargoes to the United States or Europe, while a few of the smaller sort were employed, more or less profitably, in Asiatic coastwise trade.

I have shown year after year in my commercial reports that European steamers, chiefly British, took from this port and the countries in the East a large portion of the products, either direct or by way of England, for transshipment there to the United States, to the great injury of American sailing vessels, *no* American steamers running in competition with European steamers.

But, so long as American sailing vessels, in the absence of other freight, found cargoes of coal in England for the East, they nevertheless, in the face of many and increasing discouragements, kept coming to the East. This carrying trade of coal, to me, now appears to be doomed, or, at any rate, its importance much lessened as regards *sailing vessels*. The number of freight steamers from England and Europe, chiefly British, has greatly increased, and appears to be steadily increasing, and as their tonnage is far in excess of the demand in Europe (they take *little*, by way of transshipment from the United States) for the carriage of goods, wares, and merchandise, they load coals in the British ports for ports in the East. After discharging the same, they go to ports in Japan, generally to Yokohama and Hiogo, and there load whatever they can find for New York or Europe. From Japan they go to Shanghai, to Foo-Chow, and many to Amoy, and receive the largest portions of their cargoes, and very nearly all of them receive more or less cargo (enough to complete the cargo) here at Singapore.

I have observed that from time to time some of these freight steamers brought coal to Singapore; but during the last fortnight no less than seven steamers from Cardiff direct discharged cargoes of coal at this port, their registered tonnage averaging nearly 1,200 tons. I noticed it with alarm, and lose no time to inform the Department accordingly.

If this coal-carrying trade by steamers is kept up, as it likely will be, and increase, if found to be in the least profitable or of any advantage, I fear we shall not see many American sailing vessels in the waters of the East again. American steamers, barring the precious few remaining between San Francisco and Hong-Kong, touching at Yokohama, we never had; and the outlook for the extension of American commerce in the East, unless energetic and wise measures are soon taken at home to encourage the building of American steamers, and therewith the export of American coal, is not promising. I must say that, all considered, I really feel greatly discouraged; and sight should not be lost of national prestige among the vast populations of the Orient.

A. G. STUDER,
Consul.

UNITED STATES CONSULATE,
Singapore, May 10, 1882.

AMERICAN TRADE WITH CANADA.

BY CONSUL PRINCE, OF BELLEVILLE.

I have the honor, in reviewing the business of the year 1881, to report it prosperous, with a marked improvement in all branches, and favorable prospects for the year ensuing.

In exports to the United States from this district an increase is noticeable, viz:

	Value.
1881	$1,556,254 73
1880	1,382,014 63
Increase	174,240 10

This increase is due to the large crop of barley, which shows in comparison with the previous year, as follows:

	Value.
1881	$865,745 81
1880	631,263 98
Increase	234,481 83

Lumber shows a decrease:

1880	$453,579 92
1881	292,594 30
Decrease	160,915 62

This was mainly owing to the burning of one of the largest mills in the district. It is now being rebuilt, and will be in operation for the coming season's business. The exports of iron ore show an increase in value, although a less number of tons, yet a better class of ore.

I am glad to state that the trade in American products, in this district, is on the increase. The importations at the port of Belleville for the year ending December 31, 1881, show that the United States furnishes nearly as much as all other countries combined. The customs statistics of this port show for the period named above, viz:

Goods, the produce and manufacture of the United States	$167,367
All other countries	181,971

In conversation with dealers in various kinds of merchandise I find the most of them kindly disposed to the manufactures of the United States, although they complain greatly of the Canadian tariff as a great drawback to their more general sale. Notwithstanding this, all dealers are obliged by the demand to keep some, and I am convinced from my own observation, and from information derived from personal interviews with dealers themselves in many cases, that more American goods could be sold in Canada, were the aggressive policy pursued, *i. e.*, sending commercial travelers direct to the dealer from United States houses and manufacturers. The dealers in this section mainly depend on the large wholesale houses in Montréal, Toronto, or Hamilton for their supplies, and the competition between them is so sharp, that the road is thronged by their travelers, and as a consequence only their particular styles get before the country dealer, who is the medium through which they reach the consumer. But were the samples of American goods brought direct to the notice of these merchants throughout the country, by commercial travelers for United States houses, I am confident the sales of American goods could be largely increased, and a healthy permanent demand created.

Cotton goods.—In cotton goods, especially, the styles mainly in use are English, and do not compare favorably with the American goods at the same prices. The medium and better class of American cottons, though kept in limited quantities, if pushed in Canada to the notice of the consumer in the manner I have indicated, would soon take the place of the inferior British goods. There is also an opening for an increase in trade in knit goods and underwear.

Kerosene.—American coal oil is largely sold here, but I regret to say that in some cases it is adulterated here with Canadian oil, and sold as American. Owing to the duty it is sold at an advance over Canadian, and the consumption is on the increase, notwithstanding the advanced price. It commends itself to the consumer by its superiority, and I apprehend the same will hold good in all American goods, with the same result, if brought to the notice of dealers as I have intimated.

Emigration to the United States from this district is still on the increase. A comparison with 1880 stands thus:

In 1880, number of persons, 201; property, $17,361.70; 1881, number of persons, 270; property, $21,383.50.

From present indications here the same state of things will continue, notwithstanding the strenuous efforts of the Canadian Government to attract emigration to Manitoba and their northwest provinces. The class of emigrants to the United States from Canada is not of a floating character; they are mainly skilled mechanics and well-to-do farmers, most of them of long residence here, who are now seeking, in view of the boundless opportunities for their children in the United States, locations for life. I am almost daily applied to for information as to the United States from persons intending to emigrate.

Railways.—The consolidation of the railway lines from this section northwest towards and reaching Georgian Bay, is an accomplished fact, and I think another season will see the route complete from the Georgian Bay to the Bay of Quinte, at this city, in which case the importance of this port as a shipping point will be largely increased, and a competing water route, via Bay of Quinte and the Saint Lawrence, opened to the seaboard.

The completion of the Grand Trunk Railway to Chicago is already being felt here as an outlet for the products of this district. Large quantities of grain are now sent direct from this port to Chicago, Saint

Louis, and other western points by rail. The increase in this particular is marked, and I think it will tend to the holding of more grain on this side of the line, and shipping direct to buyers, and in less shipping to commission men, as heretofore.

A new line of railway is projected, being an extension of the Prince Edward County Railway, northward to the mineral regions crossing and connecting with the Toronto and Ottawa Railway. The port of shipment will be on Weller's Bay, a very good harbor of Lake Ontario, where it is proposed to erect extensive docks for the shipments of iron ore, and the eventual erection of smelting-works. It is understood that the enterprise is under the management of Americans.

Canals.—The Murray Canal, connecting the waters of the bay of Quinte with Lake Ontario, at the head of the bay, is now, it is stated, to be commenced the present year. I have alluded in previous dispatches to the advantages of this work to the navigation of Lake Ontario, both in a commercial and public view.

American shipping.—Notwithstanding the large amounts of merchandise carried from this district to the United States, the small number of American vessels engaged in it is noticeable. I have procured the statistics of arrivals and departures from the three principal ports of this district, and they are as follows:

Inwards.—United States: Steamers, 18; sail, 56. British: Steamers, 133; sail, 321.

Outwards.—United States: Steamers, 18; sail, 55. British: Steamers, 117; sail, 395.

The mineral regions of this district, situated north of this point, and now accessible by rail, are still the subject of much attention by American capitalists, who, at present, are doing all that is being done towards the opening of new and working of established ore beds. One or two propositions have been made with a view to the erection of smelting-works at this place, but at present the plans are not fully matured. It is understood, however, that the Canadian Government favors the development of this industry, and would grant a rebate of duty on all coal that was imported for that purpose. An effort is also being made to increase the duty on steel and pig-iron, with a view to stimulate the investment of capital in their manufacture in Canada.

FRED. W. PRINCE,
Consul.

UNITED STATES CONSULATE,
Belleville, Canada, March 15, 1882.

AMERICAN TRADE OPPORTUNITIES—EGYPT.

REPORT BY CONSUL-GENERAL WOLF, OF CAIRO.

I have the honor to state that the latest report of the business transacted by the Suez Canal Company shows that England has 80 per cent. of the shipping that passes through the canal. Hardly one American flag has been saluted, and while at Port Said recently, making an inspection of consulates, I felt humiliated at the absence of the American flag, while the harbor was crowded with the vessels of all other nations.

Now that the vast and rich country called the Soudan is to be permanently opened to the commerce of the world, it would afford a splen-

did chance for enterprising American merchants to come here and build up a permanent trade. In Alexandria, among the hundreds of thriving merchants, there is only one American, who has been struggling along for years to gain a foot-hold, not for want of business, but for want of assistance and support on the part of the United States Government and its commercial men.

Even our ships of war, while lying off Alexandria, instead of patronizing this American merchant, who was a gallant officer in our recent war, made their purchases of English houses, all of which is wrong, and hurts our credit.

In oil, tallow, lard, candles, canned fruits and vegetables of all kinds, farming implements, harness, buggies, whips, revolvers, &c., there is a splendid market here, and handsome profits can be realized.

The feeling among the natives for America is most friendly and generous; it has never been more so. I have striven in every way, and against great odds, to make our sympathy and friendship known, and there is scarcely a native but knows from his Arabic paper that the United States is friendly; that we are not here to plunder and oppress, but to aid and encourage; and this feeling ought now to be taken advantage of, not only for the interest of Egypt, but also our own.

S. WOLF,
Agent and Consul-General.

UNITED STATES AGENCY AND CONSULATE-GENERAL,
Cairo, March 21, 1882.

THE NEW CRUSADE AGAINST AMERICAN MEATS.

REPORT BY CONSUL MASON, OF BASLE, SWITZERLAND.

It seems necessary to warn American exporters of salted and canned meats, that notwithstanding all that has been done during the past year to assure foreign importers and consumers of the purity and wholesomeness of that important class of products, and the scrupulous care which is exercised in fattening and transporting American hogs and cattle, as well as in preparing their flesh for export, a new and determined attack has been opened against meat importation from the United States, which, unless successfully opposed, threatens serious results. Thus far this opposition is particularly noticeable in Germany, which has hitherto not only imported American provisions largely for its own consumption, but through the ports of Bremen and Hamburg receives a great part of the meats which are consumed in Switzerland and other inland districts of Europe. It is a matter of notoriety that at some German ports imported hams encased in canvas coverings are assessed for duty as *cotton goods*, while canned meats are classified and taxed as *hardware;* because cotton cloths and metals bear higher rates of duty than meats, and the customs officers are enabled by that absurd classification to levy a heavier tax upon American hams and canned meats than is authorized by the present law.

The hostile spirit evinced in these petty exactions is still further exemplified by frequent articles in leading German newspapers, which rehash the old and threadbare falsehoods and predjudices which have long been overwhelmingly answered and disproven, and demand new

and more rigorous measures, which shall practically prohibit meat imports from the United States.

A characteristic instance of this may be seen in an article which fills more than three columns on the first page of the Norddeutsche Allgemeine Zeitung of March 18. The Zeitung, it may be observed, is one of the most influential journals of Berlin, and a prominent organ of the imperial government.

The article alluded to first quotes in detail the export statistics of the United States for 1879 and 1880, to show the enormous extent of American meat shipments to Europe and especially to the German Empire. It then cites a paragraph from a recent report by the United States consul at Bremerhaven, which relates how the North German meat-packers and exporters have been unable to withstand the competition of their American rivals, and states that even the Hamburg and Bremen lines of steamships purchase their meat supplies in New York instead of at Hamburg and Bremen, as formerly. Wrought up by this ominous array of facts and figures, the editor of the Zeitung looks over the whole ground of dispute for some effective weapon of offensive defense, and finding nothing else, takes up again the notorious tirade of Veterinary Surgeon Ruloff, which was delivered before the Berlin sanitary commission on the 16th of May last, and which has long since been translated, published in the United States Consular Reports, refuted, analyzed, and ridiculed by the American press until its absurdities have become one of the humorous features of the discussion. Serenely ignoring the overwhelming facts under which Dr. Ruloff's erratic talk has long been buried, the Zeitung goes on to rehearse his statements as something fresh and vital. The mortality among American hogs from cholera, and the export of their flesh and fat; the prevalence of various epidemics among the cattle of the United States and the certainty with which the stricken animals are converted into canned meats and shipped abroad to spread the virus of rinderpest and Texas fever in European communities; even the errors of Dr. Ruloff in calling the London Lancet an American journal and locating Huddersfield, England (with its conserved horse flesh and stale mutton) in the United States, all this is repeated and dilated upon as evidences of a great and growing peril to the lives and health of the German people.

Upon this basis the Zeitung considers the law of June 25, 1881, which prohibits the importation of American sausages, entirely insufficient, points to the prohibitive measures in Austria as an example of what Germany should do, and closes its argument by quoting in conspicuous type the declaration of the sanitary congress, which met at Amsterdam in 1879, that "the importation of American pork and lard should be prohibited."

Considered singly, or as a statement of facts against the good name of American meats, the article of the Zeitung is unimportant; but as a symptom of official sentiment at the German capital, the warning sign of further proscriptive measures, it is ominous and significant. It is, in fact, only one of a series of indications which all point in the same direction—toward a rigidly prohibitory policy, a policy not based upon any sanitary or other defect in American meats, but upon the general discontent of the governing classes in Europe with the American tariff, the superior cheapness of our breadstuffs and provisions, and the heavy outflow of gold which food imports draw from the Old World, and with the rising tide of emigration which is making such drafts upon the vital resources of the German Empire. In proof of this, and as evidence of the hollowness of the outcry against American meats, we have

only to look to Switzerland, the free and progressive republic lying between Feance and Germany, speaking their languages, but influenced largely by different interests. Switzerland is overpopulated, and her resources are limited, so that she sees gladly her surplus population finding new and prosperous homes in the United States. She has an American export trade of more than 80,000,000 francs yearly, and she is quite content to see meat, as an article of daily food, brought within reach of her working classes, by the cheapening influence of large importations from the United States. And so, while France, Germany, and Austria find American meats so dangerous to public health, Switzerland accepts the assurance of her sanitary officers, who, after elaborate and faithful research, find American pork quite as pure and good as that of any other country, and declare that it requires only what all pork should have before being eaten, sufficient cooking, to make it fit for food.

When, in June last, the federal government at Berne issued its decree declaring that no reason had been found to justify the exclusion of American pork, or requiring any peculiar inspection of such meats as a precaution against trichinæ, there remained in force in some cantons local laws, which, in effect, discriminated against American meats. Among the last to repeal these restrictions has been the canton of Zurich, its ordinance prescribing official microscopic inspection of imported meats having been repealed on the 11th of the present month. Zurich is the seat of a renowned university, and is a city in which scientific education is general and thorough. Its repeal of the meat inspection system is therefore important, because it embodies the results of the latest and most exhaustive research, and foreshadows the general abandonment of the inspection system as a precaution against trichinæ. A year ago, when the subject was under most vigorous discussion, all European authorities insisted upon official microscopic inspection as the only condition upon which hams and pork, particularly those of American origin, could be safely admitted to market. Accordingly, several American consuls urged that a system of official inspection should be adopted by American packers, and stamped certificates sent with all meats exported to Europe.

Now all is changed. The decree of the Zurich sanitary authorities confirms the verdict of the French scientists—that no microscopic inspection can be made practically effective, and that the pork raised in France, Germany, Switzerland, and other European countries, is liable equally with that of American growth to occasional infection by trichinæ, and that against this danger no official inspection is practically effective, since trichinæ have been found in meat which had passed the most thorough local examination. The conclusion is now accepted by all authorities which pronounce upon the absolute facts of the case that thorough cooking, applied to all hog's flesh used for food, is the only absolute guaranty against danger from trichinæ.

Upon the basis of these conceded facts, and the excellence and cheapness of their meats, American exporters should continue their united and vigorous opposition to all foreign proscription, which, like that now threatened in Germany, is inspired wholly by economic motives while fighting from behind the thin mask of sanitary apprehension.

Any European statesman or editor who now advocates the prohibition of American meats, because of their impurity or danger to health, argues against all the teachings of scientific examination. But such are the exigencies of public economy in some countries of Europe, that not even the exploded prejudices of 1881 will be abandoned as long as

they can be made to serve as cover for an attack upon the imports, which, while cheapening food for the people, drain the specie of the Old World into the coffers of the New.

FRANK H. MASON,
Consul.

UNITED STATES CONSULATE,
Basle, March 25, 1882.

TRICHINÆ AND AMERICAN PORK IN GERMANY.

REPORT BY CONSUL POTTER, OF CREFELD.

DR. BUSCHMANN, OFFICIAL EXAMINER OF HOG PRODUCTS IN CREFELD—HIS METHOD OF EXAMINATION FOR TRICHINOSIS—HOW HE DISTINGUISHES AMERICAN FROM GERMAN PORK—QUALIFICATIONS OF AN EXPERT—NUMBER PER DAY OF HOGS THAT CAN BE SAFELY EXAMINED BY ONE PERSON, &C.

In a recent issue of the Crefelder Zeitung appeared the following item of information:

Yesterday, in a butcher-shop in this city, the official examiner discovered among the sides of twenty-six American hogs (bacon), which had been previously examined by another inspector and declared to be free from trichinosis, two sides which contained trichinæ. A ham was also found similarly infected. The entire lot was of course confiscated.

In reply to my request to be placed in possession of the evidence upon which he had declared the diseased bacon as coming from America, Dr. Buschmann said:

I know the bacon was American from its appearance and the manner in which it was cut. I can always detect an American ham by its shape and form.

In answer to my inquiry as to whether he had any other evidence to support his declaration, he replied:

I had no other evidence, and more was not needed.

In reply to the suggestion that where a mistake was apparently so easy he should have had corroborating evidence before making public an official declaration that might, in a detrimental way, seriously affect the interests of his own people, as well as an important branch of American commerce, he said:

The evidence I had was sufficient for me. I could not have been mistaken about its being American pork.

It will be observed from Dr. Buschmann's statement, which follows, that the price of pork has been considerably enhanced in this part of Germany by the current unfavorable reports which have driven the American article out of this market.

While giving Dr. Buschmann credit for strict honesty for the feeling of confidence which he seems to have in his peculiar and easy way of distinguishing American from the pork produced in other countries, it would seem not to be difficult, under his method, to make America responsible for every unpleasant discovery in Germany of trichinosis in hog flesh, and thus secure to the German producer high prices and a home market freed from all competition.

In further replying to a series of questions which I addressed to Dr.

Buschmann, covering his experience as official examiner and his method of detecting trichinosis and other diseases in swine, he submitted the following communication, which has been translated, and is herewith forwarded as possibly containing information which may be of interest to shippers and consumers of pork in the United States:

[Translation.]

CREFELD, *February* 10, 1882.

Hon. J. S. POTTER,
United States Consul:

SIR: In reply to the various questions which you have requested me, as official examiner for the city of Crefeld, to answer, regarding trichinosis and other diseases to which swine are subject, and also as to my experience and method of detecting such diseases in fresh killed and cured pork, I have the honor to say, that in my official report to the authorities of the city of Crefeld, covering a period of five months, I have stated that of 798 sides of American hogs (bacon) 25 contained trichinæ; whilst of 700 hogs examined from this district only one was infected with trichinosis. Of twenty-two American sides (bacon), previously examined and certified to as being free from disease, I discovered five which contained trichinæ. I brought this fact to the attention of the court, and the examiner who stamped this bacon as being free from trichinosis will be severely punished, under the law which provides a penalty for neglect or carelessness in such cases.

According to my observations and experience trichinæ will be effectually destroyed by subjecting the flesh containing them to the same degree of heat which is necessary to convert the fatty portions of pork into lard. When pork and lard have been so cooked both may be eaten without the slightest danger, and neither should be used unless so cooked.

In searching for trichinæ, of the samples of flesh to be examined at least eighteen preparations should be made from the following-named parts:

From the top of the muscles of the diaphram (midriff), the so-called pier of the midriff, the interrib-muscles, the root of the tongue, the small muscles of the larynx, the abductor oculi, the masticatory muscles, and the so-called "gomelli" (gemini).

In searching for indications of measles, the following parts of the hog should be selected:

The muscles on the back of the body, the midriff, the heart, the cervical muscles, and the under side of the tongue.

In testing the qualifications of a person who is to become an examiner, it is necessary to be quite certain that the candidate has accurate knowledge of the origin and development, in hogs, of trichinosis and measles, and the transformation of the latter into tape-worms. The candidate ought also to have a correct knowledge of the size, condition, and form of trichinæ, as well as of the different stages of their development, viz: the young ones, which are still to be brooded, the wandering, or straight, trichinæ, the coiled ("eingerollxe") trichinæ, the free trichinæ, and the capsulated muscle-trichinæ. He ought also to be familiar with the *modus operandi* by which trichinæ is transferred into the human body, as well as into animals; the change in the generation of trichinæ; how they enter into the muscles; the process of capsulation; the difference between the intestinal and muscle-trichinæ, and their future transformation. He should also know in which parts of the body to search for trichinæ, and which parts of the muscles are best adapted for examination. He must also understand what precautionary measures are necessary in dissecting the muscles so as to avoid certain conditions which will make his microscopical examination very difficult. He must also be thoroughly instructed as to the existence of "rainerch" bodies, and how to distinguish between these and "pharospermiæ" utricles.

An examiner should have a practical knowledge of chemistry, and of the construction and use of the microscope, and the preparation of subjects for examination. He ought also to be able readily to distinguish the difference between trichinæ in different forms and positions, and fat cells, fat tissues, muscle fiber bundles, cut vessels, nerves, fibers of cotton, linen, and hair, air bubbles, &c.

An active and experienced examiner, with a good instrument, can, by methods now in use under authority here, easily examine from ten to twelve hogs per day, and be absolutely sure that the pork examined does or does not contain trichinæ. The authorities, under whom I hold my appointment, do not allow one examiner to inspect more than eight hogs in any one day. I am, however, by a new and perfectly safe method, invented in part by himself, able, with six assistants, to examine five to six hundred hogs per day, and be positively certain as to the presence, or otherwise, of trichinæ, and I am expecting that the limit fixed by the authorities will soon be largely extended. This new method of examination is conducted under the aid of dynamo-electrical light, which enables a skilled examiner to be positively certain as to the

esults. I beg to repeat that only temperate and conscientious persons should be allowed to hold the position of examiners.

The rate of compensation established by the city authorities here for examination is 1.50 marks (or 36 cents) for each hog, but in accordance with a petition, now before the city authorities, it is expected the rate will be lowered to 1 mark (or 24 cents), and possibly to 0.75 mark (or 18 cents) per hog, and under my new system to a fraction of this sum.

The current price for fresh killed hogs of average weight in this city is at this time about 60 marks (or $12.50) for 50 kilograms (or 112 pounds).

From the 1st of March, 1881, until the 1st of June, of the same year, I examined 564 sides (bacon) of American hogs, among which there were 14 thoroughly affected with trichinosis. During the same period I examined 42 hogs of German origin, none of which contained trichinæ. From the 1st of June, 1881, to the 1st of January, 1882, of 188 sides of American hogs examined, 18 were full of trichinæ, and of 795 sides of German bacon, of a total weight of about 3,000 pounds examined during the same period, there was one only containing trichinæ.

You may learn by the above accurately stated results that American pork has now nearly disappeared from this market. The damage to dealers arising from the presence of trichinæ has been such that they could not afford to handle the American article. Another reason for the disappearance of American pork from this market is to be found in the fact that consumers have become thoroughly alarmed by the numerous reports current regarding American pork, and they now prefer to pay much higher prices for German hams and lard, viz, 2 marks per kilogram (or 48 cents) for hams and 1.70 marks (or 41 cents) per kilogram for lard, which is equal to about 23 cents per pound for hams and 20 cents per pound for lard.

In conclusion, I will say, if parties in America should desire, I would be willing to arrange a department for examination of hog flesh, in accordance with the latest and most practical methods known up to the present date. I am confident that a practical and inexpensive system of examination is easy, and that the adoption of such a system on the part of the shippers would restore confidence in American pork and remove all objection on the part of the German Government and people to the unrestricted importation of American hog products that had been subject to such examination.

[OFFICIAL SEAL.]

B. BUSCHMANN,
Official Examiner.

In a private conversation Dr. Buschmann expressed the opinion that a system for the examination of pork which would be absolutely certain in its results could be perfected by which the cost per head of dressed hogs would not exceed five cents.

J. S. POTTER,
Consul.

UNITED STATES CONSULATE,
Crefeld, March, 1882.

THE GERMAN TARIFF AND AMERICAN CANNED MEATS.

REPORT BY MR. EVERETT, SECRETARY OF LEGATION AT BERLIN.

In accordance with Department instruction of the 26th ultimo, received yesterday, I have the honor to state that on inquiry of leading importers here, I find that the special custom-house regulation, or, rather, the construction of it, therein mentioned, classifying American canned beef as iron ware, has within the last ten days been suspended. There is always, however, the possibility of its being again applied, which greatly interferes with making contracts, besides the additional grievance, which is perhaps more objected to by importers than the duties themselves, that all tariff laws are retrospective, and thus every new regulation, especially if it increases the existing duty, may be applied to all goods of the same class imported during the previous twelve months, whether sold or not. Nor are goods allowed to be exported out of bond before paying duties, as in England and America. Whether such retrospective application occurs when duties are diminished or taken off I have not yet succeeded in positively ascertaining. The withdrawal of

the special decision in question is probably mainly due to the fact that it is successfully evaded by the importation of the beef in cans without labels, which latter are sent separately by post and affixed subsequently to the payment of the duties, and also to the proposed stamping of the cans, as is done in the case of French canned pease.

A more onerous duty has, however, been under the same regulation put on American shredded codfish, which last year came in thin wooden boxes such as Swedish matches are packed in. The duty on wood being higher than that on fish, this article of food was then taxed as "wooden ware," in the same defiance of natural history as when beef was classed as iron ware. This, however, has been evaded by packing the fish in pasteboard boxes. Sugar-cured hams being covered with linen cloth, are, by the same rule, classed as "fine linen," and subjected to a much heavier duty than pork, &c.

English emery-powder, which is one of the very cheapest articles of commerce, is, if it comes in tin canisters, as it usually does, taxed as iron ware, which effectively stops any extensive sale of it. A peculiar kind of liqueur from Russia, in bottles which are partly protected with a silken cover, is classed as "silk goods," which are taxed higher than spirits.

Where the case containing the food does not give a sufficiently high duty, the expedient is resorted to of classifying the goods as "fine table delicacies," which bear a very high duty. This is the case with our tinned tomatoes and potted meats, which are thereby restricted to a very small sale as a pure luxury, and yield little or no profit to the importers. A special instance of the consequences of this interpretation of the tariff laws deserves mention. An order was given by the army commissariat department to an American importer for a peculiar preparation of beef and vegetables mixed, and packed in tin cases of such a form that the contents could, on the march, be quickly heated and eaten from the cans as dishes, the latter being then thrown away. The order was satisfactorily filled, but as the custom-house officials insisted upon classifying the article as "table delicacies," though knowing it was for the army, the importer was unable to make any profit on his contract, which was based on the price of "beef," and declined to furnish any more. A similar proposal to furnish the German fortresses with canned food, to be stored away in case of siege, was abandoned for the same reason.

Every kind of representation and appeal has been made by importers to the treasury department here, but without avail, the reply being that domestic manufactures must be protected, and that American tariffs are equally oppressive. In spite of it, however, the German enterprise does not appear to supply the demand.

The obnoxious regulation is based on the idea expressed in the American tariff, where articles consisting in part of steel, silk, or spirits are taxed at the same rate as these latter; but the difference lies in the fact that in the present case the materials regulating the duty cannot, by the most liberal construction, be taken to form a part of the food-products imported. Nor is this claimed by the German Government. The unreasonableness of the regulation is shown by its not being applicable when the tin cases have no labels on them. Bar iron might just as well be admitted duty free, because it had not fancy-colored labels, and its unjustness is evident from the fact that as all duties are here levied according to the weight of the goods, the tins are falsely taxed as so much iron, for the principal part of the weight is in the contents. Were the beef in the tin cans taxed on different scales there might be some appropriateness in the law.

I shall, in accordance with your instructions, keep myself informed in regard to these tariff regulations, and should I find that there is any probable advantage to be gained by an official appeal to the government, I shall at once make it and report the result to the Department.

I herewith inclose the ministerial decree in regard to canned beef, by which it will be seen that only such coverings as are intended to be permanent are to be considered as dutiable, and that in these cases the material, whether of the case or its contents, which bears the highest value is to be taxed. It remains to be seen how this will be interpreted.

H. SIDNEY EVERETT,
Secretary of Legation.

UNITED STATES LEGATION,
Berlin, February 11, 1882.

[Translation of the ministerial decree.]

Decree of the royal finance ministry concerning duties on meat put up in white iron boxes with paper labels.

BERLIN, *January* 23, 1882.

In response to your report of the 11th instant, I declare myself in accord with you in the view you express therein that upon meat imported from abroad in white iron boxes with paper labels as sole covering, in accordance with the provision in the first subdivision of instruction, Item IV of the official tariff, the rate of 12 marks per 100 kilograms is to be applied pursuant to No. 25, g. 1, of the tariff, and that therefore the covering referred to is not to affect the duty-rate.

Where, in the official list of articles, in the note of "*étuis*," it is prescribed as to tare in accordance with the provisions of section 4 that *étuis*, cases and *other coverings*, which are intended to serve further as receptacles for the wares they contain, shall be subject to duty as a whole, taken together with the wares according to the rate of tariff due upon the higher taxed articles—be it the *Etuis* taken alone or its contents considered separately from the *étuis*—it is to be understood that under the *other coverings* only such coverings are intended as are according to their character and purpose to be reckoned as to *étuis*.

THE MINISTER OF FINANCE.

To the Royal Provincial Tax Director, Mr. KRÜGER ALTONA.

AMERICAN CELLULOID ARTICLES IN SWITZERLAND.

REPORT BY COMMERCIAL AGENT DE ZEYK, OF ST. GALLE.

How fares it, when truth with falsehood contends? was of late illustrated in Switzerland by the splendid vindication of the good name which the "American celluloid wash articles" rightly enjoy, and for which, as with all other American manufactures of special excellences, they must meet and overcome prejudices in the markets of Europe. I think it opportune to make known the sudden turn of fortune which befell the American celluloid wash articles, as perhaps none of the American export articles had to overcome so many difficulties before getting into public favor as these.

The manufacturers of white goods, and the linen drapers especially, feared, with good reason, that this new article might offer them a dangerous competition. It is therefore easily explained why, at the first appearance of the celluloid articles in the market, a "warning" was suddenly running through the Swiss papers, denouncing the same as unhealthy, disagreeable, and even dangerous for their explosive nature.

The prejudice against the celluloid collars, cuffs, &c., was at once planted therewith in all classes, and dealers could hardly sell a single piece, and the goods would have probably been sent back as useless, if the proprietor of their chief depot had not been a persevering and clever man. He presented the "cantonal chemist" with a number of celluloid articles, with a request to submit them to chemical examination and to try their durability and harmlessness by wearing them. Then, taking advantage of the monthly assembly of the Industrial Society, he lectured in one of their meetings upon celulloid and the articles manufactured thereof. His hearers, then and there, made all sorts of satisfactory experiments with them. Then the cantonal chemist gave, in confirmation of his analysis and personal experience, a favorable certificate, and the services of the press were called upon to circulate the results obtained at said meeting of the "Industrial Society." These results were published during several months and references were made as to the high practical worth of the celluloid articles in the papers. The names of the "Industrial Society" and the "cantonal chemist" were in themselves advertisement enough to insure success, and the goods have found, since then, a ready sale, which is still on the increase.

I think it necessary to suggest to American manufacturers:—

That all American products, wares, and merchandise on their introduction into Switzerland should, as a rule, first be taken before the respective societies or branch of business, to be discussed and examined right there, which will eventually preclude the possibility of any attempt at intrigue or calumny, to which competition may resort, to paralyze their expansion, that being besides the cheapest and the most effectual advertisement, as it is in fact the "principal point" for the success of the article.

A. J. DE ZEYK,
Commercial Agent.

UNITED STATES COMMERCIAL AGENCY,
St. Galle, March 23, 1882.

AMERICAN MANUFACTURES IN SINGAPORE.

REPORT BY CONSUL STUDER.

During the past two years the following goods were imported here from the United States (as far as has come to my knowledge), outside of the staple articles mentioned heretofore, viz:

Household furniture was consigned to one firm here on trial. The firm first tried to receive bids in their own warehouses, but found that more could be realized through a sale by auction. The goods were very neat and well shaped in appearance, offering more elegance in a house than the clumsy and roughly-finished furniture made here by Chinese cabinet-makers, however handsome and hard their wood. Round marble-top tables of various sizes, sideboards in sections for dining-rooms, rocking-chairs, and other chairs looked and took well; bedsteads though elegantly made had the defect that the four posts were not arranged for putting a musquito net over all. There are any amount of those lovely musical insects here, and therefore all bedsteads made here are provided with four posts about 7½ feet high, which give room for a large musquito-curtain, affording to the sleeper under it good breathing room and air in such a hot climate. The firm told me that most of the furniture sold well, and they would send for more, as well as give the requisite instructions to be ob-

served. I saw some of this furniture, and found that the inside work of drawers was made of pine wood, which for this market is a mistake. Pine wood, unless saturated with petroleum, will be eaten by white ants—a great pest here—in a very short time. Hard (*very hard*) wood should be used for seen and unseen parts of furniture. There are a few species of *very* hard wood growing hereabouts, say about 20 out of over 100 species, that alone are able to withstand the inroads of white ants and worms; the rest, also hard, unless antidotes are applied, succumb as well as pine wood—only that it takes longer.

Wooden ware.—Washtubs of different sizes, buckets, and pails were also consigned to the same firm. The goods were cheap enough, well made, and neat, but they would not sell well at all. Why? Because the manner of living is entirely different here from what it is with us, aside from the fact that this ware was made from pine wood, and unless constantly used would soon be honeycombed by white ants. I, myself, bought, on trial, a tub for occasional use, and it looked well made and neat. After about six months it was literally eaten by white ants, and would hold water no longer. This is a tropical country, and all water used for drinking and cooking is kept in large earthen jars, holding from 8 to 10 gallons. From that vessel it is poured into a filtering pot (unfiltered water is unhealthy, if not dangerous here) and drawn when wanted. As for washing, rare instances excepted, and then only for the light fancy articles, people get all their washing done by Hindoo washermen (called "*dhauby*"), who, instead of using washtubs, wade into a creek, fix a large flat stone, and beat the wet clothes on it until they are, or supposed to be, clean; and if the manufacturers of wooden ware derive no benefit from such a process, those of cotton, linen, and buttons do, and in a remarkably short time. But how is water carried from a well or hydrant to a jar in the house? In hard-wood buckets, very strong and cheap, made by Chinamen, and carried by Chinamen, two buckets at a time, suspended at either end of a pliable stick, which they carry on their shoulders with great ease, and often for goodly distances. A Chinaman is so dreadfully conservative about such things that he would rather hear his death-warrant read than change his *modus operandi*.

Tin-ware, stamped goods, and cooking utensils.—I tried hard to introduce them, the two former at least, but was answered that they could be had much cheaper in England. I am, however, still hopeful that various kinds of tin-ware, owing to usefulness, neatness, elegant, and at the same time practical shape, will sell. Stamped goods for cooking, and such cooking utensils as we use in America, iron pots and large kettles excepted, cannot find a market here, because iron cooking-stoves and ranges are not in use (the climate is too hot). Here the Chinaman comes in again; he is cook in every house where a cook is wanted, and the fire-place or hearth, and many of the utensils, are of Chinese conception and manufacture, and give satisfaction, requiring remarkably little fuel. For roasting, or baking pastry, &c., nearly all houses are provided with brick ovens heated with wood.

Cotton goods.—I cannot say that any essential change in the same has taken place since my last report. Some consignments, not very large ones, of unbleached drills were sent out, but sold slowly. After many conversations with merchants here upon the subject of cotton fabrics, I called upon one of the best and ablest among them, a man of enlarged views and at all times very friendly to our country, shortly before he left this place, to retire, after having been here about 15 years. I asked him for his unbiased opinion as to the reasons why there was no more

animation here for the sale of American cotton goods—how it came that the consignments of drills sold so slowly. He answered that the fault did not lie in the price of the goods, but in the quality, being too heavy and too good. He pointed out that such drills would answer well for people dressing after European fashion for coats or pants, but not for the native, who wanted much lighter material, and that the native dealers wanted light brown muslins and sheetings, or very light drills, and that they found much more profit in the same than in the heavier material, however cheap. He stated that these light goods, bleached or unbleached, were obtained from England and other parts of Europe at very low prices, and he did not believe it would pay American spinners to try to compete with the same. He admitted that in China, when they have a winter, and consequently heavier goods were required, our manufacturers had a better field and could, and in fact did, compete successfully with English manufacturers. He claimed that our cotton mills made no great attempt here to compete with light European goods, and as to bleached muslins of fine texture, such as "madapolams" for instance, for which this market was very favorable, he never heard that they were manufactured in the United States; that if the latter would manufacture the same, feeling able to compete with the cheaper labor in France or Belgium, where these light fine goods (French muslins) were manufactured, all our spinners would have to do would be to consign here, and try the market. "Remember," said he, "what we want here is light, well-made goods, and as cheap as European," and alluded to the climate, &c.

As regarded American prints (calico) he considered them very good and cheap for the quality, such as he had seen, and believed a good trade would be established providing the manufacturers in the United States would adopt the same or a similar system for their sale as observed in England, which he claimed was very convenient. He said he was aware that before our war of rebellion this part of the world was largely supplied with American calicoes, and that they were well liked. At the present time he doubted whether our calico factories, owing to the better heavier quality of the muslin used for calicoes, could successfully compete against English prints, much lighter in texture. I answered I believed they could compete successfully. "As that may be," said he, "I am not aware that your calico manufacturers make endeavors to sell their goods here." I asked him what were the particulars of that system pursued by English print manufacturers for the sale of their goods, to which he had alluded. He answered that the agent of a factory sends to a firm in the east sample cards of all the designs, the latter being duly numbered, as well as consigned boxes containing prices of prints corresponding with the sample cards, and which latter they exhibited in the sample room, as well as bolts of prints corresponding with the card; that certain numbers finding purchasers, and knowing how many pieces a box contained, all they had to do was to telegraph or write "send us so many boxes of such number or numbers," and that they could get their orders filled in a remarkably short time; that as far as he was aware this system was not observed in our country; that the agents of our calico factories were in the habit of selling boxes of assorted designs, and that when it happened that certain designs took better than others, and orders were sent, with samples inclosed, for so many pieces of this or that, they would not be filled, or only partially. He admitted that he had not experienced this himself, but heard it from others elsewhere that had.

That they want light goods here, whether of drills, sheetings, or mus-

lin, is true. Ducks and heavy drills are used only for special purposes, on vessels particularly. Good brown or grey drills, neither too heavy nor too light, find sale, as I have shown, chiefly among those wearing clothes of European cut. For bedding, as regards the great majority of the vast native element, very little sheeting or muslin is used. The climate is an extreme tropical one, and the bulk of natives, whether Chinese, Malays, Hindoos, &c., sleep on the floor upon mats, and they don't like pillows of soft material, because they produce too much heat. A mat rolled up, or a small bag solidly stuffed with moss or tree cotton, a solid roll made of something, or a chunk of hard wood, rounded off and forming an inward carve or hollow in the middle, about 3 inches diameter in the middle (this is the favorite pillow among Chinese coolies), suits them the best. Covering, they rarely need any, and only during rainy weather, when a few old rags or spare "*sarongs*" (what a "*sarong*" is I will show below) give them the little extra warmth they need. Let one who is not afraid (and there is no cause for fear, so long as one leaves the poor creatures alone, I can assure the reader) go through the many long native quarters at night, walking under the arcades found on either side in all the streets of Singapore, and those especially when it is hot and sultry, he will find many male natives (never a female) lying on small mats, spread over the tiled walks, sleeping soundly. A primitive simple people, knowing very few wants, I suppose they lived in just about the same way hundreds of years ago, and if there was any one old enough to tell us, while walking through the extreme suburbs among primitive palm-leaf covered huts, and taking in "the whole situation," he would confirm our opinion.

There are wealthy or progressive natives following, in many respects, in the train of western civilization, who use bedsteads, mattresses, and pillows the same as white people do, but *all* need less sheeting or muslin than we do in our country.

The Chinese, and their number here is very large, use more light sheeting and thin muslins for the light gowns they wear when going about and not at hard labor (the Chinese coolies, Hindoos, and other natives when at hard labor, no matter what, wear nothing but a breech-clout, and their number is large). Nearly all the blue and other material for the baggy trowsers of the Chinese is imported from China, and it is possible that the fabrics used in the same, before dyeing, are largely imported from the United States. The quantity of fabrics required for such wearing apparel must be very heavy.

The Malays, both sexes, many Hindoos, and other natives of Asia, wear, in lieu of trousers, a skirt or dress called the "*sarong*." (The word "*sarong*," in Malay, means "close fitting covering." Thus, for instance, they call a glove a "*sarong tangan*" or hand covering, and a sock or stocking "*sarong raki*," foot covering.)

What is a *sarong*? The material is generally a gingham, in which the different colored yarns, generally red of different shades, or if blue, of different shades, and relieved in places by stripes of green (preferred by Islamites), are so interwoven as to produce a pattern of large, medium, or small squares. The gingham sarongs just mentioned are manufactured in Eastern Switzerland by a few large factories that manufacture nothing else, and make frequent changes of pleasing patterns, of special study, well advised by their agents here. Of late years one or more factories in Germany and Holland have also launched into this enterprise.

In various places in Java Malay women paint, not print, very fine designs, original and peculiar in character, on pieces of somewhat heavy

muslin, mixing their paints or colors in solutions of oil and melted wax, a process only known to and prepared by them (they also first prepare the muslin in some way to fasten or bind the colors). Some of these sarongs are master-pieces of native untutored art, often commanding very high prizes. This species of sarongs go under the name of "battaks." Among the Malays they are preferred, but are dearer than any other kind, except very fancy ones made of silk. In some of the Malayan states, on the peninsula, and in Sumatra, the wives of wealthy Malays, or noblemen, are excellent silk weavers, and, imitating the square or cross-striped gingham patterns from Europe aforesaid, manufacture beautiful silk "sarongs," into which they often interweave, in a very ingenious and tasteful manner, gold threads of different texture.

In like manner they manufacture "*slendongs*," worn like a light shawl thrown over the head of a lady returning from a party (about 18 inches wide and 6 to 6½ feet long). Of either I have seen master-pieces in the art of "untutored weaving." I should be very glad to see specimens of such "sarongs" and "slendongs" as well as Java men "battaks" exhibited in coming world's exhibition in New York, where they, with other articles, should be classed as "native industry" from "Dutch India," or "the Malay Peninsula."

The *sarong* is used in this wise. Imagine a piece of fabric wide enough to reach from just above the ankles to within about five inches below the armpit (there are of course different breadths to suit different heights); wind this once around the body with about a yard to spare. (This will give any one, at once, the size and cut of a "*sarong*.") Then sew the two ends (of breadth) together, overlapping about ¾ inch, with a double row of fine stitches, and the *sarong* is ready for use, looking like a large pillow-slip with both ends open. When putting it on, the spare yard above mentioned, over and above the bodily thickness, is tucked in zigzag in front, to form folds and a band or belt tied around the body when the toilet is ready. The Malays, male, wear jackets of light material, calico, muslin, or very light flannel, reaching to the hip and buttoned in front up to the throat; while the females wear gowns (in Malay, here, called "*bajoo*," and by some "*Kabaya*") of fine muslin, calico, or silk reaching down to half-way below the knees, and pinned together in front with more or less costly pins, or brooches, according to wealth. It is for these Malay jackets and gowns ("*bajoo*" and "*Kabaya*") our calicoes would answer well. If once properly introduced, the demand would be large.

One of the ablest, brightest, and most solid of Singapore merchants, a German, who has visited the United States since I have been here, twice or three times, for protracted periods, and who exports heavily thereto, and would gladly sell here any American goods, of which he has an idea that they would sell and pay, returned a few months ago from Europe, after having visited our eastern ports. He told me that while in New York he looked at a great many of our articles of manufacture, and formed acquaintances which he hoped would lead to business relations. He told me he saw goods which he thought would sell here, especially in the hardware line, but upon inquiry he found they were too dear and would perhaps sell among a very few, but not generally; that other goods, though looking neater and better finished than European goods, could not compete in price with the latter, with an eye to "native trade." He said he found business generally good, and the home demand so great that the merchants asked pretty stiff prices, and did not care to consign abroad—would only sell upon orders for cash. I asked him, "What about cotton goods and calicoes?" He

answered that he visited several houses dealing in the same; that they all claimed to have orders for some time ahead; that he gladly would have made arrangements, largely, for the calico trade, paying more attention to that than to drills, sheetings, muslins, &c., but that he could accomplish nothing in a suitable manner, because the agents of the factories assured him they had more orders on hand than they could fill in ten or twelve months. He regretted this greatly, and that he had to leave without being able to make satisfactory arrangements for that branch of trade, and also that if the home demand was less strong, the mode of selling, by putting pieces of different designs into one box, would not suit this and other eastern markets. He admitted that our calicoes in point of material and designs were very good, and would, no doubt, sell here very readily.

The demand for printed goods either light or not too heavy is so heavy here, on the whole peninsula, in parts of Siam, in all Sumatra, and the whole Indo-Malayan Archipelago, under Siamese, British, Dutch, and Spanish rule, that it should arouse attention at home. But, again, I must express my honest conviction that Americans themselves, on the spot, must take the matter in hand to make the sale of the goods successful. They can sell such and other American goods for cash, or barter them for colonial products, the same as European merchants do, and I fail to see why they should not be successful.

Preserved fruits and canned fruits and vegetables sell very readily, and at all times, here, and, notwithstanding European competition, their sale can be increased. Certain fruits and vegetables sell more readily than others. This branch of commerce, however, deserves a special illustration, and I think a few hints may prove useful.

First, I will allude to *canned peaches*. In this branch we can beat Europe, and it is a favorite fruit in the market. The sale of the same, however, might be much heavier were it not for one drawback, which can be remedied easily without extra cost. As regards the price no fault is found, nor with the size of the cans, viz, of 2 and 3 pound (4-pound cans would also sell). The complaint is, and I have often been a witness to the same, that the largest quantity of peaches coming into this market are canned before they are ripe, or when hardly ripe. This is a great disappointment to the consumer. Very often cans when opened exhibit a fruit which, however unspoiled and sound, presents a greenish white color; some cuts are half pale green and half white, and when one comes to taste them they are often tough and hard as a raw turnip, without pleasant flavor, insipid, and more sour than sweet, and adding sugar to them does not help them much. When one has guests at the table, and sees them nibbling at what should serve them as a delicacy, and the waiter carries off the dishes with the fruit barely tasted, the host feels cheap, especially when he is an American and hoped to make propaganda for one of his country's choice fruits. International prejudices and commercial jealousies cannot be mended by a mess of tough, half-ripe peaches, but might be overcome in a measure by good, ripe, and fragrant ones. And when one gets over one bad investment and thinks "I will try again, surely not all can be bad," and buys a can with a different trade-mark and finds it no better, no one can blame him if he does not buy any more.

Occasionally, not very often, very good peaches have been imported and sold fast. Now, then, if one firm, at the same price, can put up nice ripe peaches, I don't know why others cannot. If those engaged in this branch of industry will heed this well-meant hint, I feel certain that the sale of this universally popular fruit will vastly increase in the

tropics of Asia. (To fever-stricken people good *ripe* canned peaches prove very grateful and health-restoring, while unripe, tough ones are the very reverse).

The same, last, remark holds good as regards canned plums, gages, damsons, and other stone fruit, in a great measure; they are evidently gathered and canned before they are ripe, and, by times, so very sour with a subtaste of bitterness that no additions of sugar will take the acid out. It is generally conceded that in this branch the French, who put up well-selected ripe fruits, carry off the palm, though they cost a little more, coming, as they do, in nice bottles or jars, *showing the fruit within* to advantage—inviting purchase.

Canned preserves (jams), of raspberries, blackberries, strawberries, cranberries, whortleberries, currants, gooseberries, cherries, &c., are generally good, cheap enough for the quantity, and sell readily.

Currant jelly, a great favorite here (also raspberry sirup and vinegar), and very grateful to sufferers from fever and liver complaints, owing to its pleasant subacid taste, sells very readily here, and much more could be sold at as good a price. It should be put up in jars or little stone pots.

Large quantities of preserved canned fruits, not only from the Atlantic but also from the Pacific coast, I have been reliably informed have been imported during the last two years here, and in ports of Dutch India. By times, masters of American vessels having laid in a stock of such goods, dispose of them here very readily at good prices, also of canned vegetables and corned beef.

Canned tomatoes, corn, pease, small carrots, parsnips, cauliflowers (in large bottles same as French preferred), celery-roots, beans, horseradish, &c., sell very well at good prices. The Germans, English, and French also offer very good canned vegetables, the demand being very great. Very few vegetables, least of all such as white people are used to, are grown here (say some kinds of "greens," squashes, egg-plants, cucumbers, tough beans, and a species of tough, watery, tasteless turnip), and European residents as well as the shipping, so heavy here, depend on canned vegetables. I am sure we can, in the canned-vegetable line, compete easily with European exporters. And then, while I think of it, *good cider vinegar*, a genuine article, would sell well also, since the European vinegars bottled, to judge from the labels, in England and France, often contain a fluid hardly fit for use (chemical vinegar).

Canned American milk (preserved) continues to be the best milk in the market, and the consumption of it is very large here and in neighboring ports. All attempts by European manufacturers to compete successfully with it have failed, except one brand manufactured in Switzerland, which is a fair competitor at a price a little lower.

Butter is an important article of commerce of large consumption, at high figures. It comes in tin cans of one and two pounds, as a rule of round and cheese shape, say for one pound 1¼ inch in height and about 5 inches diameter, and of two pounds proportionately larger in diameter. Good brands of butter retail readily at 60 cents per pound, and $1 for a two-pound canister, and they are imported from Denmark, Holland, and France, the Danish having the largest sale.

Since I have resided here no American butter has ever appeared in this market to the best of my knowledge. I feel, however, certain that we could enter into competition very successfully notwithstanding that at first a great prejudice would have to be overcome on account of the manufacture on a large scale in the United States of oleomargarine butter, of which some people speak with terror and trembling. Whether

it was out of fear that sooner or later "butter from Yankee-land" might be introduced here, or that the local papers here not very long ago had a copy from some other paper in its columns upon the subject of "oleomargarine" butter, in which it was shown that it was manufactured out of various kinds of "unspeakable grease," and that consumers of this butter, *horribile dictu*, stood in danger of getting the tape-worm, or trichinæ; it was further shown (no doubt to the dismay of many butter consumers here) that "oleomargarine" was largely exported from our country to the butter-exporting districts in France and Holland, where, after a further kneading in fresh milk and additions of genuine butter, it was packed and exported; and finally it was claimed that great scientists, with the aid of strong microscopes (and weak eyes probably), had discovered in the "oleomargarine" exported from our shores the very material that would breed tape-worms, trichinæ, and—I cannot remember all.

In the hope then, as now, that honest American butter would find a market here, and glad to do my share towards it, my heart fell like a barometer in a typhoon when I read this "diagnosis" and verdict of American artificial and scientific butter. But soon after another article appeared in the same paper, by a very able and unprejudiced writer, who had visited one of the largest of American oleomargarine factories, and who had evidently examined very closely the whole process of manufacturing, and who very ably described all he had seen, claimed that the greatest cleanliness was observed throughout the process, and that very able chemists and scientists pronounced "oleomargarine" to contain in a higher degree the ingredients necessary to constitute good butter than that same article from a dairy itself, and that it was one of the greatest and finest inventions of the age. I felt relieved; our fame for butter was vindicated, and I suppose the dealers in butter did a better business, while I did not expect that there would be all at once a stirring demand for "the butter" over which such a battle between scientific people had been fought.

Whatever virtues or faults "oleomargarine" may possess, for the sake of extending our American butter trade, I do wish that this species of butter might get a new name (some word from the Greek dictionary), and that the old name be laid *ad acta* in an effectual way, or reversed.

Butter, to sell well here, must be of good, rich yellow color, for I do not believe that light-colored or white butter, however good, would bring the same price as Danish, Dutch, or French (Normandy) butters, which really have a rich golden color, whether natural or artificial I don't know, and which are chiefly used for table butter. The consumption of butter here and in all eastern tropical or semi-tropical ports is very large indeed, notwithstanding the high price.

I feel certain that better butter for less money (as a question of competition, if it should arise), and in desirable quantities, can be exported from the United States, and, as an old "Westerner," I think I can point out how it can be done.

I can well remember that years ago, on the prairies of the West, farmers raising and grazing cattle, chiefly in remote and thinly-settled places many miles from good marketing towns, especially in Northern Iowa, hardly knew between spring and fall what to do with all their milk, and draw benefit from it at the same time. Many had no cellars, or no good cellars, or spring houses, and when they made more butter than they needed for family use they could not preserve it so as to retain its flavor. But though fresh and well preserved in crocks or jars, when they brought it to market during fine weather, the supplies

from all sides would, as a rule, be large and the price very low, and *good butter*, owing to long distances to town and in an open farm wagon in fine weather, would get warm and look greasy and sell for less on that account, and there were sundry other drawbacks. As a consequence many farmers, beyond churning what butter they needed for their own use, gave the milk to the calves and young pigs. Again, others turned their attention to the manufacture of cheese, many finding a good source of profit in that.

The finest yellow butter of rich color, with a very light tinge of pale green (as it appeared to me), was obtained in spring just after the grass was sprouted sufficiently for cattle to feed on, and I feel quite certain that finer-looking butter, or of better taste (when made right), could not be found *the world over*. On the northern prairies *such* butter could be had in great abundance until hot weather set in and the prairie grass had grown tall and tough, say from the opening of spring until the middle of July safely; and, again, from after hay-making time until frost set in. Now, if enterprising men would either start dairies on a large scale, and make butter during the periods just mentioned, and pack it when *fresh*, churning daily, wash and salt it well (mixing with the salt small quantities of saltpeter, powdered sugar, and borax), into one and two pound canisters (also three and four pounds), of the shape mentioned as in vogue in the tropics, and label the same with an inviting and suitable trade-mark containing a special proviso, for instance, "prepared for tropical countries," or, "warranted to be good in the tropics," &c., and make arrangements with honorable and wide-awake agents at sea-ports (in London or Liverpool, particularly, as regards Europe), a large quantity can be sold right there to vessels bound for the tropics, and shipped by the same to firms in the tropics.

Another good plan would be for a butter-packing agent to establish, centrally, among large prairie farmers living no farther than five or six miles from him, and to make contracts with them to take all the good fresh butter they can make, to be delivered at least twice per week at his store at a stipulated price for the season. Such a packer should have all suitable and necessary arrangements made to wash, if necessary, and prepare the butter without delay after receipt, as well as pack it into tins, and see to it that the latter are soldered carefully (not to forget all European butter canisters in this market are lightly japanned). The newspapers published in Western prairie towns and cities should then thoroughly vent this "prairie enterprise" in judiciously-written editorials, making known to the world the superiority of "American prairie spring butter," &c., and, marking the article, mail many copies of it to all the American consuls in all the hot countries outside of Europe. It will well pay the exporters to do this, as well as to advertise in our very able commercial periodicals that go all over the civilized world. This is *well worth* a trial, and all there is necessary is to treat the matter judiciously, to make it a point of, nationally, commercial honor to export only a *good genuine article*. If that is done, success is certain.

Salted and preserved provisions, mess beef, and pork find, for the heavy shipping here, more than for local consumption, very ready sale. The most if not all of it is imported from North German and British ports, and it is to be reasonably presumed that those ports receive their supplies as regards beef, alive or fresh, and pork in a dry, salted state, from the United States.

For large vessels it can be sold here in large tierces, but owing to the climate, half and quarter tierces take better; because a tierce un-

opened, unless the contents can soon be disposed of, will soon become stale or tainted.

From the United States direct, I know of but one shipment of mess beef and pork, consigned to a firm here, and it proved a failure—a loss. Why? When the tierces were tasted, the emanation arising from the brine was all but inviting, and when the heads from several of the tierces, at random, were removed to see what was wrong, it was found that the meat appeared sound and good enough, but so thoroughly soaked with this offensive brine as to render it decidedly undesirable for food. There was plenty of salt in the tierces, but a nasty scum on top of the brine. The firm went to a good deal of trouble to make the goods sell. They had all the meat taken out of the tierces (they had many) and washed in fresh, clean brine. They threw out the old brine and salt, washed the tierces, repacked and resalted the meat, and, for brine, they used clean filtered water. It did no good; the "old smell" would not leave, and they were obliged to sell the lot *as best they could*, and, naturally, at a loss. What was it that caused this nauseous emanation? The tierces were good and clean, of white oak; the meat, as we have seen, had remained sound and fresh looking, proving conclusively that plenty and good salt had been used. It must have been the water used for brine that did the damage. What else could it have been? Packers can answer that better than I can. The climate had perhaps something to do with it; but, if so, how did it come that mess beef and pork packed in Europe did not suffer from climatic influences, remaining sound and free from uninviting odors? I have been told, as well as read somewhere, that packers in England prepare the brine chemically to make it remain odorless.

Hams also sell very readily and at high prices. Good, well-preserved hams sell without trouble for from 26 to 30 cents per pound. Different firms import them from England, Germany, and Holland. As far as my experience goes, English hams sell the best and are the best; because after one is cut for gradual use in a family they suffer less from the climate than any other kind, remaining generally sound and sweet to the last. The so-called "Westphalia hams," German, are also very good, keeping a little less well than the English. These hams come into the market in a baggy shape, sewed up carefully in a canvas cover, packed in rice hulls or chaff, so that there is a heavy layer or lining of the latter between the ham and the canvas. The ham when taken out has the appearance of having been rather dried than smoked, and they, evidently, must have been thoroughly well cured before being dried. They are a really good article, and all our packers have to do is to cure, dry, and pack them in like manner. The different firms that import hams here never receive many at a time, and dispose of them without much delay, because the best of hams will not keep good long in this hot, moist climate. But, all in all, the sale for local consumption and the shipping is heavy. A very few firms here, at different times, imported American sugar-cured hams, under the opinion that they were better and kept longer than any other kind.

Now, as regards their quality, when they are not kept so long in a hot ship-hold, arriving here free from damage, they are, beyond any doubt, the best hams one can get; but once cut, unless disposed of in at least three days, they don't keep, become tainted, and to keep them but little longer unsold in a warm house they will spoil completely. As I have tried the experiment myself, I can speak with certainty, and regret it is so. They are sewed up in muslin bags, painted with yellow ocher, but that seems to be no protection for them in this climate. Our

packers, of course, can overcome these difficulties, and ship as good hams as they do in Europe; and if we had only steamers coming East direct from Atlantic ports through the Suez Canal, making the voyage to Singapore in about 45 days, shipments of hams could come through nearly as fast as from Europe, and find a good and profitable market. This being the great point of transshipment for ports of Southern Asia, it would prove of importance for the sale of all such and other ports.

Lard.—A goodly quantity is used here by Europeans and natives (not Mohammedans). As regards the natives, the Chinese especially, they are rather consumers of fresh pork, and when they need lard they render out fat pork. European lard being imported in unsuitable packages, and being at times of very bad quality, in unlabeled canisters, the public feel shy of buying "tinned lard" (a cat in a bag), and prefer to buy a piece of fat pork in the market and fry the lard out of it. It is an unhandy process, but in the absence of anything better it must answer. Now, *good prime lard* (kettle-rendered) would sell readily at a good price, if properly introduced; and if the exporting firm in America will not only give its name on the label or trade-mark, but also say "warranted prime," it will help the sale greatly. I would, however, recommend that lard should be packed into small tins only, say of 2, 3, 4, and 5 pounds—not larger, because in this climate lard, when exposed to the air and not used within two days, becomes so rank or stale as to be unfit for cooking. Care must be taken that all tins be thoroughly well soldered.

Meat in tins.—American corned beef in tins is well liked here, and the consumption of it would be very large if it were not so scarce in the market, and so unreasonably dear. Without knowing the retail price of this excellent article in the United States, I feel certain that it must be at least 200 per cent. cheaper than here. I am not aware that any one here imports it from America direct; it generally comes from intermediate ports in Europe or in China, and from the masters of vessels coming from America.

The beef slaughtered here is generally poor and tough. The largest portion of the beeves killed here comes from Siam and Malay provinces on the peninsula, many of them after having been worked hard and fed indifferently, and the rest, by far the poorest, are bullocks that are used here to pull the two-wheeled carts serving for the transportation of all goods sent to and from warehouses, wharves, &c., as well as for all sorts of building material. When a bullock gets too old or poor to pull well, he is sold to the butcher, who sends him on a pasture of very tough, poor grass for a few weeks, and then kills him. A beefsteak from such a bullock reminds one of a bundle of gut-strings glued together, and it is well to have extra good molars and patience. Fowls as a rule are tough also, and dear enough for the quality, but the consumption of these is very large, because they are preferable to beef. Good mess-beef is difficult to get, because one does not want to buy a barrel of it, and, after opening it, eat it all in two or three days, as it would not keep, not to mention the quantity of water, with or without lime-juice and other liquids, one would have to drink after such salt repasts.

The only good meat one can get in this colony is mutton, of which the consumption is very heavy, notwithstanding its high price. The most of the sheep slaughtered here come from Bengal. This species of mutton is excellent and juicy, but the sheep are small. Occasionally there are shipments of larger, but by no means better, sheep from Australia and China.

Mutton is very dear; one has to pay for a hind leg from $2.75 to $3.

Consumers heave a sigh, but knowing it is the only good meat they can get, they foot the bill and wait for the next one, without grumbling. Geese and ducks are in plenty and not too dear; but they are tough, too, and most of them "fishy." Turkeys will not breed here, and are imported from the upland districts of Java, and sell at from $8 to $12, and even more for heavy ones.

Under the circumstances mentioned, canned American corned beef, if it could be had readily and at *reasonable* figures, say 50 per cent. above the wholesale price in America, would find a very large sale among the residents and the shipping. It keeps good and odorless, exposed to the air, longer than any other kind of salted meat. I tried this myself, and found that it was as good after one week's exposure as on the first day, and it might have kept longer if I had had any more of it. For people who have to visit out-of-the-way places on the coast or the interior of the peninsula or islands, and must bring their food, cooking utensils, and a cook with them (this includes planters opening new estates in the jungle), this "canned corned beef" is the very best article (also beef extract) they can take with them, together with biscuits.

My opinion is, that if an able and circumspect business man would open an establishment here for the sale of American salted and preserved provisions, canned fruits, vegetables, oysters, meats, butter, lard, &c., together with other American goods, he could do a very profitable business. The longer he would remain the better he would become acquainted with all classes of people, their wants, tastes, habits, and usages, and this would teach him what kinds of new articles to import, and how to introduce them to a good market for them.

CLOCKS AND WATCHES.

During the past two years occasional shipments of clocks from different factories to different firms here found ready sale. Being really very cheap, within the reach of even poor natives, and as a rule very reliable time-keepers, besides being small and of neat appearance and finish, well made, they recommended themselves.

It costs here $5 to get a watch cleaned, and as one can get a reliable clock for about $3, he can afford to lock his watch up until he gets to a place where it can be attended to for less money. The "clock trade," then, I may say, is not only getting on nicely, but looking up.

SEWING MACHINES.

There have been occasional shipments of the sewing machines, both of foot (treadle) and hand power, and they meet with a very favorable reception; in fact, so favorable that they seem to drive the cheaper German machines out of the market. Hand-power machines, being smaller and cheaper than those of foot power, have a larger sale and are bought chiefly by natives.

Some manufacturers wrote to me with a view of creating a market for their goods, and offered to send me machines as samples. In reply, explaining that I could not be their agent, I gave them the names of very good firms, with the recommendation to send them a small consignment. They failed to follow my advice, while others who did not write to me, and consigned of their own accord to firms here, found a ready market for their goods. Let our manufacturers continue to turn out as good machines, at as reasonable prices as possible, for this remote market, and they will not have to fear competition from other countries.

Let them bear in mind that the great majority of purchasers are native tailors and seamstresses, all of whom are poor, and some very poor.

FIRE-ARMS.

Some American repeating rifles and revolvers were imported here during the past two years in small numbers as a matter of trial, and the rifles, especially, found rapid sale among the planters, travelers, and sportsmen, and the demand is steadily increasing. There is one difficulty, however, as regards this branch of our industry, viz, the transportation of fixed ammunition. Very few steamers will carry the latter, because it enhances greatly the amount of insurance on vessel and cargo. When any ammunition is taken by steamers, it is only in very small quantities, and sailing vessels being slow in delivering freight causes delays in the sale of rifles.

EDGE-TOOLS.

The sale of edge tools, notwithstanding the fact that Singapore is in the center of one of the heaviest timbered regions in the world, is almost null and void; this, in a great measure, is owing to the absence of an able and practical American agency for the introduction and sale of the same. Another good reason is, that the mechanics here using edge-tools are very nearly all Chinamen, who bring their tools with them from China, or buy them here from their own countrymen. The Chinese are used to these tools and they are always of excellent temper, answering well among the hardest known woods here. It may be known to some, but not generally, in our country, that the Eastern races understand how to harden or temper steel for edge-tools and weapons in a manner superior to any other peoples or races. I have myself seen the edges of "perangs" (the "macheta" of the Malays) and "klewangs" (the largest battle-sword of the Malays) tried, by cutting copper coins in two, without showing marks on the edges (this often), and once a wrought nail with a like result. It would be almost impossible to induce Chinese merchants to adopt our edge-tools. Such among them, carpenters, as have been in the United States, or served on American or European vessels, might perhaps form an exception to this rule; but their number, comparatively, is rather limited. The shipping being very large here, especially steamers, the ships' carpenters are the best customers of "civilized edge-tools," and buy them in the ship-chandleries, and these are nearly all of English manufacture; but such a thing as a "tool-chest" after American pattern is not to be had. Our manufacturers of edge-tools, or their agents, must take the matter in hand if they want to sell their products here successfully. The Malays living in the jungle, and who clear the same upon contract for planters, cannot be induced to lay aside their weird and strange-looking light axes for American axes.

This has been tried repeatedly by the tobacco planters in Sumatra. Their axes resemble a narrow-shaped hatchet (such as the planters use in the United States), only that they are longer and a little wider, and that the eye for the helve, round in shape, is in the hammer part, or upper end, of the ax. Their helves are much longer than ours, of elastic wood, and only as thick as an average broom-handle. The helve is so fastened to the ax, with rattan thongs, as to prevent it from slipping or turning in the eye. Very nearly all species of wood in this region are hard, and some exceedingly hard, and it is wonderful to see

with what dexterity they handle their chisel-like axes—how they make the chips fly, and in what a short time they make a tree fall. They make contracts for cutting down jungle at very low figures, but that contract does not include the burning of what they cut down.

The planting coolies must do the latter part, which, in order to produce a good ready burning, requires much ax work. Not so many years ago the coolies used for this work the Malayan ax ("bilian," in Malay); but, gradually, the planters managed to induce them to use American axes, though without the American-shaped helve, they preferring straight helves. This change in axes required much persuasion, but after a few had tried our ax, and found what effective work they could do with it, the rest of the coolies on all the neighboring plantations soon followed, and now they could not be induced to exchange them for others. I am alluding to the tobacco-planting districts of Deli, Langkat, and Sirdang, all lying close together, for which Penang, in this colony, has ever been the place of import for all things needed from abroad, as well as the place of shipment of their tobacco to Europe. The port of Penang, and not Singapore, has become the place of import for American axes; and if there was an immediate demand for the same here, firms who have their agents or branches in Penang would get them from there. Other countries, I have been told, have endeavored to compete with our manufacturers in this article, but they cannot. Those Chinese coolies know the shape, quality, and trade-marks of the axes they have been using, and (it has been tried) they will not, as the planter employer makes them pay for them, buy any of different shape or trade-mark.

There are various patterns of Malay axes throughout the Indo-Malayan Archipelago, and a collection of them would be very interesting and instructive, but it would require both time and money to make it. I mention this for the information of manufacturers of edge-tools, knowing that they are anxious to get new patterns.

With such a collection should also be sent a few kinds of "*perangs*," or underbrush choppers, which in shape resemble our American corn-cutter, and are from 18 to 22 inches in length, forming a slight outward curve from the handle to about five-eighths of the length (I mean edge outward). The blade in the middle is about 1¼ inches in breadth, tapering off slightly to the end, where the breadth is about one inch; others, again, have the same breadth for three-fourths the length from the end. The thickness of the blade, lengthwise, is greater in the middle than at the back, forming what is called check, the whole length, the center third of the blade protruding, generally, a little more than the other thirds. There is a wooden or horn handle to it, well shaped for the hand to make the grasp easy and firm, and a downward curve or hook at the end, to prevent it slipping out of the hand. The Malays use this "*perang*" for all ordinary jungle cutting, excepting trees of over 10 inches diameter; and great is their dexterity in the use of the same. It is also their favorite weapon in combat with the ferocious beasts of the jungle. In fact, a great number of land Malays, called "Rayols" (distinct from the "Orang laut," who follow the sea, or are fishermen), have absolutely no other weapons than the "*bilian*," (ax), the "*perang*," and the "*kris*" (dagger), which latter they carry in their girdles, and, occasionally, spears of hard wood (of the "*Nebeng*" *palm*), with or without iron points, and variously-shaped knives of native make. There has been more activity displayed by Europeans in various provinces on the peninsula, under British rule, during the past two years, towards selecting, securing, and clearing, as well as planting,

lands, and this may be the means of creating a greater demand for edge-tools, axes especially, as well as saws of various kinds. The next year or two will throw more light upon this subject than I had time or facilities for ascertaining correctly during the past two years.

SOMETHING ABOUT CARRIAGES.

A good many carriages are in use here, such as barouches, one and two horse phaetons, and one and two horse palanquins, broughams, dog-carts, so called (two-wheeled, with double seat, having lazy-back between to sit back to back, without top, unfortunately), and the "*hack gharrey*" (pony palanquin), the last mentioned in great numbers, about a thousand or more for the city passenger conveyance.

There are here two European carriage factories and some Chinese shops, the latter for the repair of vehicles more than new work. The European factories turn out some very good and neat vehicles at high prices, and repair as well. Many of the materials used by them, "findings," are imported chiefly from the United States. But the majority of vehicles, not including *hack gharreys* (these are all made here), are imported from various countries in Europe, and by times buggies have been imported from the United States.

Now, if the matter was taken in hand properly, a great many American carriages might be sold here. There is no one here (at least I never heard any one) disputing American carriages for graceful forms, good build, and fine finish, and if they can be put into the market here at a lower figure than those of local build (and I know they can be at a good profit), I think they will sell readily. But a few items must be taken into consideration, and these I will point out.

All vehicles to be used here must be so constructed that they can be turned sharp round (around the axis of a vehicle so to say) in narrow places, or within limited space. All vehicles in use here are thus constructed, and any imported without this provision, no matter how handsome and well made, sell badly or not at all.

American buggies, which have been imported here from time to time, at long intervals, did not take well, because the front wheels were too big, had too much diameter, and on that account, when the driver wanted to turn round in a tight place (and Singapore is full of such places, from various causes), it could not be done if the buggy was not to be tipped over; and some did tip over. As a consequence they disappeared from public thoroughfare. Another drawback complained of, the buggies, on account of large front wheels, had, was that they were difficult of ingress or egress, for ladies especially.

The horses in use here are imported chiefly from Australia (large carriage horses particularly) and from Bombay, also from Calcutta. Australian horses, generally landed here in droves, are on an average four years old, and the majority of them are hardly bridlewise. They are taken charge of by European horsebreakers, and very often, before they have been properly trained, they are sold in pairs or single to owners of carriages. The coachmen and grooms hired by residents owning carriages are, as a majority, Boyans and Javanese (Malays), while the drivers of hacks or "gharreys," as they are called here, are very nearly all Kluigs or Hindoos. As regards the former, Boyans and Javanese, while there are some good, safe drivers among them, most of them are unsafe and do not understand the nature of horses. They are reckless drivers, fond of racing, and when anything goes wrong they lose their presence of mind, have rarely sufficient strength to check runaway

horses, and the worst of all, when they believe themselves in danger, they are often apt to jump nimbly off the seat and leave the inmates to their fate.

There is, probably, not a city anywhere where there are more runaways, carriage accidents, and casualties than Singapore, and the latter are much engendered, owing to Chinese and other native processions, with their clatter, noise, weird banners, and designs, not to lose sight of numerous fire-cracker explosions, &c. People in vehicles, with safe horses and reliable drivers, are, in a measure, as much in danger as those with unsafe draft and guidance, on account of collisions. It becomes, therefore, apparent that unless vehicles can be turned sharp round safely they are not of the desirable kind. There are thoroughfares here full of vehicles of all sorts, including the slow, heavy, lumbering ox-carts of the natives, and pedestrian natives carrying goods for sale, packages, &c., or unencumbered; and in such a bedlam of reckless, ignorant, and indifferent Jehus, &c., it is very essential that a driver be able to turn round most any angle sharply and easily to prevent mishaps.

A "hitching-post" for horses is an article unknown in Singapore. Those riding in two or one horse carriages have (the latter less), in addition to the driver, a groom behind, and all carriages must be so arranged as to have a standing board or seat for a groom behind. Of course, with one or two servants accompanying a carriage, it is not necessary to hitch horses. When one drives his own vehicle, the groom sits behind and can hold the team or horse while the proprietor makes his call. Others, not driving themselves and having but one groom, let the latter drive. I show this to give an idea to our carriage-makers as to the appendages needed to carriages for this market, and why needed. All two-horse carriages, regardless of name, have a seat for the coachman and the back-board or seat alluded to; and one-horse phaetons are so arranged that a seat for the coachman right over the dashboard can be fixed and removed, with ease, at the will of the proprietor, to enable him to drive himself or let the groom drive; if he drives himself the driver's seat is taken off and the driver stands on the back-board, and if the latter drives, his seat is fastened on. This latter species of carriage is the best liked.

Rain storms being frequent and often very violent, the tops of phaetons and buggies should come well forward, and the apron should be large enough to come up to the shoulders of the inmates of the vehicle, and the material used for the tops and aprons should be very good.

In reality the pony is the most popular draft animal for vehicles of the lighter sort in the colony, and is safer in several respects than a horse.

Australian horses often do not endure the climate well, get sick easily after a little unusual exertion, and are, as a rule, short-lived; and unwise or careless grooming by natives (their masters knowing but little more) has much to do with it. (Bombay horses of Arabian extraction, though smaller, are the safest horses.) The ponies imported from Sumatra, Burmah, Siam, and China, and various islands of Netherlands India, with any kind of proper treatment, stand the climate and hardships much better than horses, and are, as a rule, excellent travelers, and often amazingly strong for their size and weight.

Sumatra ponies (bred on the highlands of that island) are the strongest, toughest, and best shaped, and command—a good one—$150 easily. It is my opinion that light, but strong, pony phaetons and buggies, large and strong enough for two full-grown persons and a driver—phaetons to

have a movable seat in front, as alluded to, and buggies to have two seats, one with top (seats movable and resting on a box)—would sell best here. They should not weigh over 350 pounds, and if less the better, so they are strong, and their cost should not be more than $200 to $250 delivered here, and all complete. The cheaper, the greater their sale, if good and neat. Pony phaetons should be fixed for one or two animals.

The roads here are splendid (metaled)—smooth, hard, and well looked after—none better anywhere, and enabling a good pony to pull three persons, with ease, for a considerabe distance.

All vehicles here must be provided with two lanterns, and their owners, under penalty, are required by law (and it is strictly enforced) to light them after sundown (darkness, after sunset, follows in a very short time). The front glasses or panes (thick white glass) must show a good bright light. The back pane has a metal or glass, bull's-eye, reflector; it, further, is that pane which is opened for lighting the lantern, having two hinges connected with the bottom, and a spring lock on top.. The side panes are of red glass (so ordered by law), and enable one driving behind a vehicle at night to know what is in front of him, the red glimmer being visible for a great distance. This "lantern law" is a necessary and wise one. Short, thick sperm candles are used in these lanterns. They come in packages containing six, called a pound, and retail at 20 cents per package. Good serviceable carriage-lanterns retail in the bazaar at from $7 to $8 per pair, fancy ones of superior material and finish costing, of course, more, and they are all of English manufacture.

Fancy imported carriage-whips are of slow sale here. This being the cane and rattan country, and nature being prolific in excellent fibers, the natives manufacture very good whips, long and short, lasting well, for very little money. Fifty cents will buy a good average one.

HARNESS.

Horse and pony harnesses are imported mostly from England, though lately Chinese harness-makers, who formerly only repaired harnesses, have learned to turn out pretty fair work. I have never seen any harnesses here as neat and pleasing to the eye as our American harnesses. They are heavy, clumsy, and strong, and, though well made and finished, they are, at best, far from being graceful. The material in them I must say is good. The average price of a single harness is $35, with patent-leather collar, silver-plated hames, buckles, and terrets. The pads—self-adjusting—are made very strong and large, and the flaps broad, fully 5 to 6 inches across the widest part, and the shaft-tug inside and outside; belly-bands are also made very strong and heavy, with straps fully 1¼ inches wide. This is necessary, because hills are plenty and breech-bands are not in use here. The shafts are so fixed (iron pegs on the outside of the shafts) that the shaft-tugs cannot slide forwards or backwards. There is a hip-strap, with loop at each end (buckled back), for the traces to run through. Round reins (nor webs) are not in use, nor any round work about a harness or bridle—all flat work. There is a martingale, but without ring attachment for the reins (they don't know anything about martingale rings here), which is a great mistake, as I told many having unsafe horses. I have never seen a harness here yet having, in lieu of a collar and hames, a neck-strap with breast collar, and, considering the constant tropical heat, it surprised me.

I think if a harness-manufacturer at home would get up a strong pony-harness, of very good leather, with neck-strap and breast-collar, taking

care to make the pad, shaft tug, and both belly-bands, as well as the traces, strong, the straps of pad attachments 1⅛ and the traces 1¼ inches wide, no round work about the bridle or reins (the latter all leather), but all neatly and well stitched, creased, and finished, and consign it here to a good bazaar firm (say, one harness for pony, another for horse, and one set of double carriage harness), he would not only not run a risk of not getting his money back, but he might, very likely, get orders.

The number of harnesses constantly required here is very large—for ponies especially. Cheaper harness, just as good, of the description above mentioned, with malleable japanned buckles, &c., instead of silver-plated, for the use of hack ponies, should sell well here. Believing that leather of very good quality is cheaper in the United States than in Europe, though the work of making a harness may cost a trifle more, I fail to see why an effort should not be made of introducing them here. They would also sell, I believe, in Penang, Manheim, Rangoon, Bangkok, Saigon, Batavia, and other ports in Java and Dutch India, as well as in Manila.

Good harness and bridle leather, both black and russet sole leather, calf and sheep skins, patent and enameled leather, and oil-cloth enameled and plain of various colors, I feel fully certain would sell here.

Accordingly, as I find time (if having the necessary assistance in the consulate, with sufficient allowance), I will report upon other American goods, which, perhaps, might be introduced here. The absence of American merchants in this respect is what hinders me most in creating a market.

In the mean time I will, as often as possible, report from time to time upon anything that seems to me to be of any benefit to American commerce, or a detriment to the same.

A. G. STUDER,
Consul.

UNITED STATES CONSULATE,
Singapore, Straits Settlements.

TRADE OF NANTES WITH THE UNITED STATES.

REPORT BY COMMERCIAL AGENT GIFFORD.

With the exception of grain, the commerce between the United States and the ports of the Loire continues to be carried on indirectly, for the most part by way of Havre and Bordeaux. The articles of import, other than grain and pine timber from Florida, are merely ships' stores, and the small quantities of coal and iron among the exports were taken as ballast by vessels which had come from the United States laden with grain. The quantity of grain imported from the United States during the year ended June 30, 1881, is very important, while that of other articles is singularly small.

There is no means of obtaining exact statistics in regard to American goods entered at other ports and afterwards brought here and exposed for sale. But among other such American articles which may be had here are canned goods, lard, salt, beef, petroleum, sewing machines, stoves, a very small quantity of agricultural and other machinery, and a few other articles. It is probably true, however, that there are very few parts of the civilized world where American commerce in general is so poorly developed as in this part of France. This is in a measure due

to the traditional conservatism of the Bretons, but is chiefly the result of the deliberate and systematic opposition to American trade on the part of rich and powerful local interests. Besides, the commercial traditions of Nantes are all in favor of colonial trade, while the great line of subsidized steamships connecting St. Nazaire with South America, the West Indies, and Mexico, and the lines connecting it with Liverpool and London, determine decisively the direction of the trade of the Lower Loire.

WHEAT.

By far the greater part of the $6,017,718 worth of wheat imported into this district from the United States during the year ended June 30, 1881, arrived in the summer and fall of 1880. This year, owing to the abundant harvest in Western France, there is not much demand here for American grain.

SARDINES.

Two-thirds of the exports to the United States from this district consist of sardines. For the year ended September 30, 1881, the exports of this article amounted to $167,209. The greater part of the sardines finally reaching America from this district are purchased by the importers at Havre or Bordeaux, and, adding these to the large quantity forwarded directly, it is clear that, for an article of at least secondary economical value, the sardine has a considerable commercial importance. But the fishery during the past season having been a complete failure, the existing high prices will no doubt check export trade.

AMERICAN PORK.

The importation of American pork having entirely ceased by reason of the prohibition of the government, the consequent high prices cause great dissatisfaction, except with an interested class, which is here numerous and powerful. The inutility of this artificial increase in the price of food is all the more apparent from the fact that no case of disease has been reported during the last three years, at least, from the use of American pork in this part of France.

GEORGE GIFFORD,
Commercial Agent.

UNITED STATES COMMERCIAL AGENCY, NANTES.

COMMERCE AND PRODUCTS OF MADAGASCAR.

REPORT BY CONSUL ROBINSON, OF TAMATAVE.

TRADE WITH THE UNITED STATES.

The trade at this port with the United States for the last six months of 1881 shows a considerable falling off from the average of previous half years, the total amount of imports from the States during the period being only to the value of $122,728.60, and of this amount $37,950 was imported by a German house and German vessels. The goods, as usual, were in a very large proportion, our unbleached sheetings and shirtings; that is, these goods represented $119,432.99 of the whole amount. The balance consisted of refined petroleum, wheat flour,

pilot bread, shooks, common chairs, clocks, shoes, canned goods, "Holman's liver pads," &c.

The total exports sent to the States during the same period amounted to $101,304.96, and of this amount $58,763.42 was sent by a French house in French steamers via Marseilles. These exports consisted wholly of the two articles, rubber and dry-salted hides.

Two United States vessels only, total tonnage 1,161, reached this port during the six months; while the arrivals and departures of vessels of other nationalities during same period were above the average of previous years. The total number of arrivals and departures of vessels of all classes and all nationalities was 127. Of these 6 were steamers of war—4 French and 2 English; merchantmen, 121. Aggregate tonnage, 22,159, by nationality as follows: 2 American (sail), aggregate tonnage, 1,161; British, 9 steamers and 53 sail, making 62, aggregate tonnage 4,242; French, 23 sail and 20 steamers, making 43, of 12,942 tons; Danish, 2 sail, of 381 tons aggregate; German, 10 sail, of 2,382 tons aggregate; Norwegian, 1 sail, 301 tons, and 1 Malagasy sail, of 750 tons. Fifty-four of these vessels were small coasters, under British and French flags, of an aggregate tonnage of 801, trading between this port and the other points of trade on this coast. It must be remembered that this statement is not of the number of different vessels, but that of the number of arrivals and departures, the coasting vessels and some of the others having made several trips each.

Several circumstances have conduced to the reduction of the trade with the States. The first is the same chronic malady that gives the "cramps" to all trade with this part of Madagascar, and which has been severely epidemic during the period reported, *i. e.*, scarcity of the silver five-franc pieces, the only currency received by the natives. These pieces are selling all the time at a premium of 20 to 30 per cent. Another was the national holidays (Fandroana), which were continued longer this year than usual, and during which time very little business can be done. But another circumstance, one bearing upon our trade only, and the one which was, probably, the principal factor in the reduction of sales of American cloth, was this: A short time previous to the holidays, which commenced in September, the government threw upon the market the accumulations of American cloths received for duties. This always has for effect the reduction of prices for a greater or less time, and the importers, if they are in a situation to do so, hold to their goods until the channel of the market for this commodity has worked itself clear again.

The dealers in European goods here are making strenuous efforts not only to retain the trade in all other commodities, but to decrease the demand for the American unbleached cottons by forcing upon the market large quantities of European cotton goods other than the unbleached. The effort to compete by pitting the English or other European unbleached against the American was given over some time ago.

However, the sharpest competition is waged in the purchase of the two principal native productions for export, hides and rubber.

THE COFFEE CROP.

The coffee crop is much less this year than last, owing to some disease of the shrubs on or near the coast, where the principal plantations are located. On my journey to and from the capital I had opportunity to observe the condition of the coffee shrubs at all the different elevations, and on all the different kinds of soil, the natives of every vil-

lage on the route growing a little, just about enough to show to the traveler what might be done by proper and extensive cultivation. At the same time that I saw that *all* the foreign-born planters had located their coffee plantations too low down—too near the coast—I formed the opinion that Madagascar is destined to be some day *the* great coffee-growing country of the Indian Ocean. After reaching an elevation of perhaps six to eight hundred feet above the level of the sea, and at a distance of sixty to seventy-five miles from it, I found the coffee trees in a perfectly healthy condition, and loaded with the berries. And this was found to be the condition *all* the rest of the way to the capital in the highest province (Imerina) of the island. In the vales of the mountains, on the declivities of the hills, or on the highest summits, on the great plain lying between the two belts of forest, at some 2,000 feet above the sea-level, whether the soil was alluvial, clay, gravel, or loam, the coffee shrub was in a strong, healthy condition, and loaded with fruit. In the province of Imerina, which is about 4,000 feet above the sea, the shrub grows shorter than at lower elevations, but I judged the yield to be equally as good as from the larger shrubs below, by reason of the branches commencing at six or eight inches from the ground, and putting out more of them, which push out nearly horizontal to a length of three to four feet for the lowest, and gradually shorter from the bottom to the top of the shrub, thus forming a most beautiful cone of a deep evergreen. These were loaded with berries from bottom to top. This was the condition of the coffee trees when I went up in December, and on my return in the last part of May they were in like condition with another crop, thus giving two crops a year.

I was told by the residents, native and foreign, that the shrub has never been afflicted in those higher regions with any disease, and that the yearly crops have been uniform. But, as stated above, the native does not trouble himself to plant many trees; when he can gather 100 or 200 pounds to sell he is satisfied.

On my return journey I took care to notice at what point of the route the coffee shrubs began to show marks of deterioriation from an unfavorable climate too near the sea-level. And, as above stated, I found at a distance of 60 to 75 miles from the sea, and at an elevation of 600 to 800 feet (this by estimate—I had no instruments), I noticed that the shrubs began to have a sickly appearance, the leaves were paler, and the fruit less, and some of the berries were blighted. As I descended from village to village, I noticed that this deterioration rapidly increased, until at points 25 or 30 miles from the sea, and 100 to 200 feet above its level, the shrubs were bearing not over one-third the quantity of berries, and of these more than one-half were blighted. Notwithstanding these plain facts, all the plantations thus far started by foreigners are located within this unfavorable and unhealthy belt.

SUGAR INDUSTRY.

The sugar industry is making some progress. Although the manufacture of the present crop is not yet finished, yet it is so nearly done that we can approximate a correct estimate of the quantity from the plantations in this district. It will be 450 to 500 tons.

What is really needed here for this industry is facility to procure, by the planters, small mills of a variety of capacities from 20 arpents to two or three hundred, such as our manufacturers make so cheap and well. The country is not favorable for locating large plantations with the whole accessible to one mill. Then, again, there are many who would like to engage in this industry, but lack the capital to open a large plantation

with an expensive mill. I also think it would be better for the planters to save the expense of the centrifugal machines, and ship their sugar in the crude form in barrels to be sold at the refineries. As at present manufactured here, it is of too high a grade for the United States market under the present scale of duties.

I have delayed this report several weeks, hoping to receive the reports from the consular agent at Mojunga to send with it, but will wait no longer; will embrace his reports in my next. I have, however, the digest of his invoice-book for the first and third quarters of 1881, showing the shipment to the United States of hides and rubber to the amount of $94,058.49. The imports from the States during the same periods probably exceeded that amount, as they *usually* do.

W. W. ROBINSON,
Consul.

UNITED STATES CONSULATE,
Tamatave, February 13, 1882.

TAX UPON COTTON-SEED OIL IN ITALY.

REPORT BY CONSUL CRAIN, OF MILAN.

The law passed by the Italian Parliament imposing a duty of 14 lire per quintal on all imports of cotton-seed oil was designed, as is known, for the protection of the olive oil industry of Italy. The advocates of the measure claimed that the admixture of cotton oil with olive oil, and its sale as olive oil, was a direct damage to one of the largest agricultural interests of the country.

The law in question went into operation on the 22d of April, 1881, and has brought results very different from those anticipated, as will be seen by the following:

The monthly imports of cotton-seed oil from March 1, 1881, to March 1, 1882, were as follows:

	Quintals.
March, 1881	66,228
April, 1881	94,378
May, 1881	98,614
June, 1881	98,614
July, 1881	98,627
August, 1881	98,627
September, 1881	98,632
October, 1881	98,632
November, 1881	98,639
December, 1881	98,740
January, 1882	none
February, 1882	110

During the same months the exportation from Italy of olive oil was as follows:

	Quintals
March, 1881	201,485
April, 1881	265,503
May, 1881	316,655
June, 1881	370,005
July, 1881	400,121
August, 1881	449,411
September, 1881	504,253
October, 1881	563,828
November, 1881	627,970
December, 1881	677,990
January, 1882	52,059
February, 1882	102,511

These figures would indicate that the importations of cotton-seed oil subsequent to April, 1881, were made under contracts which ran to January 1, 1882, from which date all importations practically ceased.

They further show that the mixing of cotton oil with olive oil enabled the Italian dealers to find foreign markets for large and always increasing quantities of Italian olive oil; but that the exportation of olive oil almost entirely ceased with the stoppage of the supply of cotton oil.

Mr. A. Rossi, to whom I am indebted for these data, and who is one of the ablest of Italian writers on questions of political economy, does not hesitate to declare the law a blunder, in an article recently published in the "Sole," the leading commercial newspaper of this country. Its repeal may be expected.

DUNHAM J. CRAIN,
Consul.

UNITED STATES CONSULATE,
Milan, April 5, 1882.

THE PINE-APPLE TRADE OF THE BAHAMAS.

REPORT BY CONSUL McLAIN, OF NASSAU, N. P.

The cultivation and shipment of pine-apples is the most important industry of the Bahamas, much capital and many people being employed therein, so that the material prosperity of the colony from year to year depends largely upon the success or failure of this crop. The fruit was introduced into these islands about one hundred years ago, but it did not become an article of export until the year 1842, when the first cargo was shipped to the United States. Of the several varieties of pine-apple only two are considered profitable for cultivation for export, viz, the "scarlet" or Cuban pine, and the "sugar-loaf." The former was brought to these islands from Cuba in 1850, and is now the leading variety of commerce; the latter, a very juicy and luscious fruit, is exported principally to England.

The Bahamas generally are noted for the thinness of their soil, which seldom exceeds a depth of from six to eight inches; but fortunately soil is not a *sine qua non* with vegetable life in these islands. The islands are composed largely of a species of limestone made up of sand, carbonate of lime, and the remains of myriads of defunct coral insects, so that the rock itself is a fertilizer of no mean quality; indeed, prolific vegetation flourishes apparently upon the bare rock, the surface of which is broken and honeycombed, the small openings being full of vegetable mold, and furnishing holding places for the roots of not only plants and grasses, but often for those of large and stately trees.

The ordinary soil of the Bahamas is not fitted for the culture of the pine-apple, which plant requires a depth of at least two feet to be grown successfully. But upon many of the islands are found extensive tracts of soil composed of a reddish clay, about two feet depth, peculiarly adapted to the pine-apple. This soil is very rich, being, as geologists say, composed of the decayed remains of decomposed vegetable life and the *débris* of shell-fish and coral insects, each cubic foot of the ashes or soil representing the decay of about 1,000 times that quantity of original matter.

In preparing a field for planting, the first thing to be done is to clear away the dense natural growth of bush or *chaparral*, which is done

by cutting and burning, the cutting being effected by the blacks, not with the modern ax but with heavy, clumsy, long-bladed knives, called *machetes*. The plants are then set out about two feet apart, and seldom, if ever, fail to take root and grow. When once started, the only care of the planter is to keep down the weeds; the plants will take care of themselves if this is done. The fruit will come to maturity in from eight to nine months, at which time the main stalk dies, leaving an abundance of young sprouts, which in turn spring up and bear fruit. The bush or plant upon which the pine-apple grows is at maturity about 30 inches high, with long, slender, hard, sharp, blade-like leaves, with serrated edges. The leaves bend outward from the center, and out of this center shoots the fruit—one apple only to each plant. An acre of good land will easily support 6,000 plants of the sugar-loaf variety, or about 5,000 of the scarlet kind. There is considerable land suitable for pine-apples which has never yet been cultivated. Good land can be bought at prices ranging from $5 to $20 per acre, depending in value upon the size of the tract, the fertility of the soil, and its proximity to a suitable place for shipment of the fruit. As much of the fruit is taken on board of vessels which call along the coast during the season, a plantation which borders upon some cove, bay, or good anchorage is a valuable one.

The average life of the "scarlet" pine is three years; that of the sugar-loaf is about five. The average weight of the fruit in the Bahamas is from three to three and a half pounds. A field is generally gone over three times during the season, affording three grades of fruit, called first, second, and third cuttings. The scarlet variety ripens a month or two earlier than the sugar-loaf. Owing to the sharp serrated leaves of the plant the gathering of the fruit is a tedious and difficult matter, the men, women, and children engaged in the work being obliged to wear heavy canvas leggings and gloves with gauntlets to protect themselves against the sharp spines of the plant.

The pine-apple plants furnish but one regular crop during the year, although the local markets are seldom without a few pine-apples on sale. About the middle of April the first cuttings are made of the scarlet pines, and the last is made about the first of July. The sugar-loaf pine is at maturity during July and August. The shipping season is one of signal activity in the colony, for when the fruit is ready for the knife, it must be cut and hurried with all speed to market or it will be lost. From 75 to 100 cargoes of fruit are shipped from April 15 to July 15, and about 40,000 pine-apples make an average cargo, the total exports reaching from 4,000,000 to 5,000,000 pine-apples during the season. The fruit for shipment is never allowed to ripen, but is cut when green, as soon as it is full of juice; otherwise it would spoil before reaching a market.

The vessels engaged in this trade are mostly small schooners of from 75 to 150 tons burden, noted for speed, and able to make the run from the islands to Baltimore, Philadelphia, and New York in from four to eight days, more than two-thirds of them being New England fishing vessels and Baltimore pungies. The average price paid for the fruit is about as follows, viz: 42 cents per dozen for first cuttings; 36 cents per dozen for second cuttings; and 30 cents per dozen for thirds. Some growers ship their own fruit; others sell to local buyers, who purchase the crops at the foregoing figures; others sell to ship-masters, who call with the cash and take the fruit away with them.

The expense of transporting the fruit to market is not great, as the pines are shipped in bulk; and so at first blush one might think the

trade would be very profitable, since the pine-apples retail in the United States at from 12 to 25 cents apiece. But the whole business is to the last degree a hazardous one. If everything is favorable, good profits are realized, but a few untoward circumstances will bring utter ruin. There may be too much rain, or a drought; at times armies of rats and land crabs invade and devour whole fields in a night or two; bush fires not infrequently devastate a plantation; prices may rule low. If none of these things occur, and the fruit is put on shipboard in good order, the gauntlet of an ocean voyage is yet to be run, and adverse winds and stormy weather mean destruction by decay of the whole cargo, whilst the average of loss on the speediest trip is seldom below 33 per cent. Again, the ship may be borne on her course by prosperous breezes, and may arrive in port with her cargo in fine condition, only, alas! to find other vessels just ahead of her, the market glutted, and her perishable fruit must be sold at what it will fetch. Then the dealer in pine-apples is in an uncertain frame of mind from the shooting of his fruit on the plant until he has received his account of sales, and generally speaking only those dealers who can handle several crops in succession, thus establishing an average, can count with much certainty on making the business on the whole a profiable one.

Only a small portion of the fruit is shipped from Nassau, vessels preferring to clear direct from the out islands, where most of the fruit is grown, in order to save time and to hurry the crop to market. There have been years when the pine-apple crop has been sold for from $400,000 to $500,000; sometimes it has brought less than half those figures. The scarlet variety goes to the United States; the sugar-loaf to England. As the latter voyage is a long one, the pine-apple plant is cut off at the root, and plant and fruit are shipped unseparated. This is an expensive proceeding, but the prices realized in England justify it; indeed, in no other way could the fruit be taken thither. Sales are conducted differently in London and New York. In the latter city the fruit is sold over the vessel's side; in London it is landed, assorted, catalogued, advertised, and sold on fixed days at established prices. The fruit, remaining on the plant, can be kept a long time.

The crop is not now all exported, a portion being put up or preserved in tin cans, several factories upon the islands being engaged in this work. Some of the fruit exported is preserved in a similar way in the United States, but it is inferior in flavor and quality to that preserved here, which is allowed to ripen on the plant, whilst that canned abroad has been plucked green for shipment, and has deteriorated by the voyage, handling, bruising, and sometimes by decay. The factory in Nassau is owned by Joseph S. Johnson, esq., probably the most extensive grower and dealer in pine-apples in the colony, and who has his export and sales headquarters at No. 26 Burling Slip, New York. There are two other factories upon an out island, one of them a branch of the Nassau factory, the other belonging to Charles T. Sands, esq., another extensive dealer in this fruit. The factory in Nassau consumes about 25,000 pine-apples per diem, and puts up from 200,000 to 250,000 cans of fruit during the season; about half as much more is canned at the out-islands factories. The wages paid the operatives are low, being 50 cents per diem for men, 25 cents for women, and 12 cents for children, and even lower wages suffice for the plantation hands. Yet these are not to be called "starvation prices," for food for a day for an ordinary family can be bought for 25 cents, viz, a quart of hominy or "grits," a string of fresh fish, a quart of cornmeal, with sugar-cane and fruit for

dessert; whilst, as for clothing, a cotton shirt and a palmetto hat will bid defiance to the most inclement day of this "Isle of June."

The machinery employed in these preserving factories is entirely of American manufacture. The refined sugar used is imported from New York, and the tin cans and wooden cases are manufactured to order in Baltimore, these three items forming an important part of the cost of the goods as they leave the factory. In order to encourage this branch of industry, the colonial government permits the importation of machinery and factory materials free of duty; but when the canned goods are sent to the United States, a duty of twenty per centum is collected by that government. Some of the goods are now being sent to England, there being a demand for them there, and the market proving profitable, because they are admitted free of duty by Great Britain.

For several years prior to 1880 the pine-apple industry was unprofitable to the colonists, owing to a succession of disasters in the way of bad weather, low prices, and decay, and the business languished, many being discouraged; but during 1880 and 1881 good crops were made, better prices prevailed, and the business materially revived. The prospects for 1882 are regarded as decidedly flattering at present.

In 1880 about 340,000 dozen pine-apples were exported, invoiced at $151,145. In 1881 about 363,000 dozen were shipped, invoiced at $138,150. There were also shipped of preserved pine-apples in 1880 about 200,000 cans, valued at $29,970. During 1881 this number was increased to 287,000 cans, invoiced at $40,000. The bulk of both fresh and preserved fruit went to the United States in 1881, viz, 323,000 dozen pine-apples, valued at $109,000, and 270,000 cans preserved pine-apples, valued at $33,150. These values, of course, are the cost or invoice prices, and when sold the goods realized fully one-third to one-half more; so that the total crop of 1881 brought at least $250,000, of which the United States paid the Bahamas over $200,000.

The crop of fresh pines conveyed to market in 1881, amounting to 363,000 dozen, made 85 cargoes in all, of which 79 went to the United States and 6 to England. Of the 79 cargoes to the United States, 55 were carried in American bottoms and 24 in British vessels. A few thousand dozens of pine-apples were also sent by the American mail steamer to New York in May, June, and July, shipped in barrels. The amount paid to these American schooners as freight money was about $40,000.

From the foregoing figures it is seen that the United States has nearly the entire trade of the colony in pine-apples, fresh and preserved. This trade can be largely increased, and I believe it to be to the interest of American producers, manufacturers, and ship-owners that this industry should be fostered and encouraged for this reason: The entire proceeds of the shipments to the United States are spent there in the purchase of provisions and other merchandise, the freight money goes largely into the pockets of American ship-owners, and the machinery, sugar, cans, cases, &c., are all purchased in the United States.

The trade, such as it is, has been profitable to the United States, and can be made more so. There is opportunity for developing it. We can always control it, for ours is the only market which can take the perishable fruit. The people of these islands can raise enormous quantities of this delicious fruit, and it will be grown, if a profitable market can be had. No matter how large the proceeds of sales may be they will be spent in the United States, and the more cargoes the more employment and freight money for our vessels.

The fact remains, however, that it is a hazardous trade, hazardous,

I mean, to Bahama growers and shippers, and anything we can do to increase the probabilities of its being profitable to those engaged in it will be the best way of encouraging and fostering it. The profits on the whole are only fair at best, and at present we have the best half of the loaf and none of the risks. Growers and shippers here feel that the United States could well afford, with a view to foster the industry and promote their own interests, to abolish the 20 per cent. duty on fresh pine-apples, which would in part compensate the shipper for the average loss by decay on the voyage, which is 33 per cent. I am not aware that the pine-apple trade of the Bahamas comes in serious competition with any similar industry of the United States.

In 1881 the Bahamas sold to the United States pine-apples to the value of nearly a quarter of a million dollars, all of which went directly into the hands of our producers and manufacturers. They also paid $40,000 freight on this fruit to our ship-owners. I am confident the trade can be increased, and it is worth considering whether the removal of the duty would not impart a fresh impetus to the industry, and so benefit our producers, manufacturers, and shipping far more than enough to compensate for the small loss to our revenue, especially as Congress seems to think our revenue is already in excess of our requirements. Here is a case where a reduction of the revenue will accrue to the positive benefit of our own people and also help our neighbors.

THOS. J. McLAIN,
Consul.

UNITED STATES CONSULATE,
Nassau, N. P., April 14, 1882.

CONDITION OF TRADE IN CANADA.

REPORT BY COMMERCIAL AGENT BUFFINGTON, OF CHATHAM.

The trade in American refined oil is largely on the increase in Canada, notwithstanding the duty of 7½ cents per gallon to which it is subject. At present the cost of American white oil (including duty and freight) to wholesale dealers is 25 cents per gallon, and the price of Canada oil is 16½ cents. The retail price of the former is 35 cents per gallon, and of the latter 30 cents. The difference in quality is so overwhelmingly in favor of the American oil that it is coming into very general use, and will compel a reduction in the price of Canada oil, or virtually drive it from the market.

If the American refiners will maintain the high character and excellence of the oil sold to Canadian dealers they will find that the demand for it will largely increase. It is so far superior to the Canada oil that consumers cheerfully pay the difference in price.

THE CANADIAN TARIFF,

Or the national policy, as it is here called, does not seem to realize the results promised by its advocates. While it has undoubtedly contributed to building up some manufactories in Canada, and has shut out a certain class of foreign goods from the Canadian markets, it has nevertheless failed to accomplish the great object which its supporters claimed it would do, namely, change the balance of trade in favor instead of against Canada. The first year of its operation was very gratifying to its friends, as it actually did, for that year, reverse the order of trade, the returns showing that the imports had fallen from $93,081,787 in 1878, to $86,489,747 in 1880 (the tariff being in operation during 1880),

and that the exports had risen from $79,323,667 in 1878, to $87,911,458 in 1880—showing a balance in trade in *favor* of Canada of $1,421,711. This result was hailed with great satisfaction by the friends of the measure, and they looked forward with confidence to a like result in the future. But in this they were mistaken. By the trade and navigation returns laid before Parliament for 1881, these expectations were blasted, and instead of a balance in favor a very considerable balance *against* Canada is shown, as follows:

Imports	$105,330,840
Exports	98,290,823
Balance against	7,040,017

And this, too, notwithstanding the boom in the export trade of 1881, caused by the favorable winter, enabling dealers in wood and lumber to get from the bush an extraordinary large supply of that kind of merchandise to the river bank for export. The coming year, if the volume of imports are maintained, will show an increased balance against Canada, inasmuch as all indications now point to marked falling off in quantity and value, particularly of lumber, which usually largely swells the volume and value of exports.

H. C. BUFFINGTON,
Commercial Agent.

UNITED STATES COMMERCIAL AGENCY,
Chatham, March 18, 1882.

SHIP-BUILDING ON THE CLYDE.

REPORT BY CONSUL HARTE, OF GLASGOW.

I have the honor to submit herewith a tabulated statement of the tonnage of vessels built on the river Clyde during the year 1881.

I venture to believe it will be interesting to the Department, not only as showing the present condition of this famous industry, but as also showing the different countries that avail themselves of its superior facilities, and recruit their mercantile navies from the yards on the banks of the Clyde. That skilled labor, invention, and special knowledge have done as much as a favorable locality and an easily available raw material to render Clyde ship-building famous, is evident from the fact that during the latter half of the year 1881 Clyde workmen and Clyde engineers have been eagerly sought after on the banks of the Tyne and Weir, and that Scotch iron-workers, shipwrights, joiners, frame-setters, and blacksmiths are at present employed on the Mersey and in Belfast.

There is, however, no attempt in the annexed statement to enter into the general economy and details of Clyde ship-building, but simply to record the result of that industry as shown in the tonnage built, and its demand by foreign nations. It will be seen that the demand for transatlantic voyaging and service in American waters during the year 1881 was 54,433 tons built, and 45,864 tons now being built. The actual tonnage built during the year 1881 is unprecedented; the nearest approximation to it being in 1874, when the total reached 262,430 tons. An increase in the number of sailing vessels may also be noticed. This report is supplemental to that of September 30, 1881.

BRET HARTE,
Consul.

UNITED STATES CONSULATE,
Glasgow, March 8, 1882.

General abstract showing total tonnage built during the year 1881.

Name of ship-builder.	Steam vessels.	Sailing vessels.	Indicated horse-power.	Gross tonnage.
J. & G. Thomson	7	0	29,500	27,100
Jno. Elder & Co	8	1	43,728	26,575
Stephen & Sons	10	0	11,710	21,819
Dobie & Co	6	1	12,450	19,004
W. Denny Brothers	8	0	17,500	17,478
London & Glasgow Company	7	0	12,150	16,150
Russel & Co	0	11	.....	14,640
Wm. Millar & Sons	6	0	10,900	14,256
Barclay, Curle & Co	6	3	7,000	14,092
Caird & Co	4	0	13,950	14,050
Connell & Co	4	1	9,800	13,856
A. & I. Inglis	6	0	11,050	13,670
D. & W. Henderson	6	1	11,549	12,620
Lobnitz & Co	8	1	4,650	10,870
H. Macintyre & Co	14	0	5,515	10,505
Scott & Co	12	0	6,850	9,556
R. Napier & Sons	3	0	7,800	8,640
R. Durcan & Co	4	5	2,430	7,930
Aitken & Mansel	4	0	7,300	7,809
Cunliffe & Dunlop	8	6	3,070	7,109
Jno. Reid & Co	4	3	5,000	6,974
Steele & Co	3	2	2,330	6,890
W. Simons & Co	6	0	3,400	5,900
H. Murray & Co	6	1	2,915	5,452
Murdock & Murray	6	0	3,150	5,407
Blackwood & Gordon	12	0	4,255	4,372
Napier, Shanks & Bell	3	1	1,120	3,286
Campbletown Company	5	0	2,000	2,850
Robt. Chalmers & Co	1	1	2,570	2,570
W. Hamilton & Co	1	0	1,500	2,000
W. Burrell & Son	1	0	800	1,346
Jno. Fullarton & Co	4	0	970	1,370
Campbell & Co	4	0	650	1,200
Seath & Co	9	1	315	1,179
Hanna, Donald & Wilson	8	3	170	824
Scott & Co., Bowling	3	0	110	500
Barr & Sheaver	0	2	.....	400
W. Fyfe	0	5	.....	268
Troon Shipbuilding Company	0	1	.....	198
J. Macadam	0	2	.....	15
Totals	217	52	293,017	340,823

Comparative statement of tonnage built during the years 1878 *to* 1881, *inclusive.*

	Tonnage.
1878	215,640
1879	173,820
1880	242,774
1881	340,823

Statement showing tonnage built for river, harbor, and coasting traffic.

Steamers—	Tonnage.
Claymore	1,000
Lizard	410
Locust	410
Lamprey	312
Alligator	932
Dromedary	922
Gorillo	929
Total tonnage	4,915

Statement showing tonnage built for transatlantic voyaging during year 1881.

Steamers—	Tonnage.
Servia	8,500
Catalania	5,000
Spartan	3,700
Moor	4,000
Hansa	700
Alaska	6,932

Steamers—Continued.	Tonnage.
Edam	2,957
Bohemia	3,409
Ville de Rome	1,834
Ville de Naples	1,834
Armenia	3,396
Galatia	3,096
Belgravia	5,075
Athenian	4,000
Total	54,433

Tonnage of vessels building or under contract at 31st December, 1881.

	Tons.
For transatlantic voyaging and service in American waters	45,864
For foreign countries	34,500
For British ship-owners, for various services	85,337
Total	165,701

Statement showing tonnage built for foreign countries during the year 1881.

Country.	Steamer's name.	Tonnage.	Totals.
		Tons.	*Tons.*
Germany	Hansa	700	
	Prince Alexander	2,978	
	Catania	2,275	
	Peter de Connick	3,310	
	Sorrento	2,330	
	Edam	2,957	
	Bohemia	3,409	
	Siak, paddle steamer	400	
	Lolland	700	
			19,059
France	Saigon	1,224	
	Ville de Rome	1,834	
	Ville de Naples	1,834	
	Passe Partout	50	
	Amitie	900	
			5,842
Italy	Iniziativa	2,104	
	Archimede	2,937	
	Orion	2,800	
	Palma	1,100	
	Crete	800	
	Risveglio	700	
	Persevero	700	
			11,141
Denmark	Skjold	2,000	
	Horsa	800	
	Lunfjorden	500	
	Christiansund	800	
	Odin	2,000	
			6,100
Spain	Leonora	2,850	
			2,850
China	Chi Yuen	2,200	
			2,200
America	Pallas	595	
			595
New Zealand	Manapouri	1,828	
	Matrinapua	426	
	Steel stern paddle steamer		
			2,254
Australia	Yacht	35	
	Cushiedoo	250	
			285
India	Paddle steamer shipped in pieces	191	
	2 barges shipped in pieces	715	
	4 steam launches, on deck	65	
	Steam yacht	21	
	Lorna	118	
	Ban Whatt Soon	307	
			1,417
Egypt	Vigilant	120	
	20 sailing barges shipped in pieces	2,400	
			2,520
	Totals	54,263	54,263

"INTERNATION" OR EXPORTS FROM THE ZONA LIBRE INTO MEXICO.

REPORT BY CONSUL SUTTON, OF MATAMOROS.

Because of the peculiar workings of the laws of the Zona Libre much interest has been felt as to the relations of this city, the principal port of entry in the Zona Libre, with the other parts of the republic. It has been and still is very difficult to obtain any statistics of this traffic.

I have previously given the reports for three years, and having now obtained statistics for two later years, I have put the whole five years together, and have added some other tables and calculations the better to show the values of this trade.

The term "internation" is used to denote the goods entered at this custom-house for transport to the interior of the republic and to other points inside the Zona Libre. The total importations are distinct from the internation.

The laws of the Zona Libre, which I have previously reported at length, allow all goods to be imported at Matamoros and Nuevo Laredo, in the State of Tamaulipas, free of all duties except ½ cent per pound, and one and thirty-seven hundredths of the regular Mexican import duties.

The cities of Camargo and Mier, both in this State, have also been lately made ports of first entry. It is said that the city of Guerrero, lying between Mier and Nuevo Laredo, will be soon opened to commerce.

This will make five ports, all in this State, lying along the river frontier, into which goods may be imported under the laws of the Zona Libre.

These laws have lately been modified by the executive decree of June 25, 1881, which took effect November 1 and 15, 1881.

By this law, an abstract of which was given in my annual report dated December 22, 1881, the former free list of the regular Mexican tariff has been almost abolished.

On nearly all of the former free lists a tax on the gross weight is imposed of from 50 cents to $1 per hundred kilograms, or, say, one-quarter to one-half cent per pound.

On goods which have heretofore paid duties, an additional duty of about the same is imposed.

On wines and liquors, which are not included in the above two classes, an additional duty of from one and three-fourths to 12 cents per kilogram on the net weight of the goods is imposed.

These additions affect the Zona Libre, as well as the rest of the country, and seem to be the first step toward doing away with this peculiar institution.

By the other provisions of the Zona Libre all goods thus imported may be consumed or transported to other points inside the Zona, and there consumed free of further tariff duties.

The limits of the Zona have not been changed, and are practically the narrow strip of Tamaulipas from the Gulf up the river to a few miles above Nuevo Laredo and back from the river, not to exceed about twenty-five miles.

It is only when goods once imported are to be internated—that is, sent out of this or other cities of the Zona, whether to the interior or to other points of the Zona—that they are again manifested at the custom-house.

If manifested for the interior the regular import duties are then paid, less such an amount as has been paid on the same when first imported.

A bond with heavy penalties is then given in addition to paying the full duties that the goods shall be conveyed by certain routes and without damage to the cord and seal, which is attached to every package. The "guia" or internation permit must likewise, under penalty of bond, be countersigned by various customs authorities on the route and at the destination, and the same returned by the merchant and delivered to the custom-house within a prescribed time.

If the goods are for points inside the Zona Libre the conditions are all the same, except that the full duties are "computed," and, if the required proof to cancel the bond is duly returned, the duties are thereby canceled. If not, then they have to be paid, and also the penalties of the bond.

There has been so much written and said as to the opportunities for smuggling afforded by this system that the figures given herein have a special interest. It is not to be doubted that smuggling into Mexico from the American side of the river of American goods is a considerable industry.

Parties from the interior of Mexico are continually coming to the American side, there to buy and smuggle the goods back to their homes.

It is also undeniable that purchasers in this and other cities of the Zona can get their goods out of here and into the interior, in small lots, at least, without payment of duties.

To that extent of course the depots afforded by the Zona Libre must be detrimental to the revenues of the Mexican Government. But American goods, and goods which are free from import or have very low import duties in the United States, can be purchased by these contrabandistas as cheap and generally cheaper on the American side of the river. If then they, or the merchant who sells to them, take out an export permit at a nominal cost they can cross their goods whenever and wherever they choose without further molestation from the American inspectors.

The contrabandistas will of course endeavor to so choose their times and places in crossing the Rio Grande as to avoid meeting the Mexican customs guards. Once over and fairly on their way they are comparatively safe. The sympathies of the inhabitants are strongly in their favor, and they can travel by night and by unused routes to their destination. This is generally some of the smaller interior towns, where the customs authorities can be easily avoided.

If they fail to avoid the guards their resources are not by any means exhausted. Sometimes they buy off, sometimes they escape by flight, and at other times they fight bloody battles for their goods.

Within the last two years these battles have been unusually fatal, and the numbers engaged on either side sufficient to make quite a respectable skirmish.

Where one train of contrabandistas is discovered it is probable that three or four go unmolested to their destination.

It is said that the contrabandistas, aided by the sympathetic residents of one of the smaller cities not far from the frontier line, lately adopted the novel expedient of blockading the custom-house until such time as they had concluded their operations.

It is said sadly by merchants who do a large business with this custom-house that, unfortunately for them, the contrabandistas are the only persons whose papers are ever entirely regular and correct. They tell with great gusto the story of a former famous smuggler who had for years successfully delivered his goods without the assistance of the custom-house, and who, in his advancing years, thought to make amends

for his former wickedness by making for once in his life a regular permit and paying duties thereon. The story goes that he swallowed his wrath many times at the multitudinous rules, checks, documents, &c., which he had to make in this city, and finally set out with duty paid goods for Monterey. But, unfortunately, the custom-house there found some flaw in the papers and seized all the goods, besides inflicting fines and penalties. He was so disgusted with the result of his attempt to do a legitimate business that he never after repeated the experiment, but went his way independent of tariffs and custom-houses.

Whether this particular story be true or not, it is possible, and the whole thing, denouement and all, is probable, with the exception of his voluntary attempt to do a legitimate business.

As I have said, it is more easy to smuggle into the interior by starting from the American side, where the contrabandista is not embarrassed by time and place, but has his choice of both. The only hinderance is that certain European goods cannot be bought on the American side, but must be purchased in the Zona Libre.

As it is easier to guard exit from a city than to watch a long line of frontier, it is correspondingly more difficult to smuggle out of this city in any considerable amount.

Just how much of this is going on now is necessarily a matter of uncertainty, but I am of the opinion that it is less than in former years. I believe, however, from what I have lately learned, that smuggling into Mexico from the American side farther up the river, is more extensively carried on now than for the last three years.

The feature in this Zona Libre business which most directly affects the customs revenues of the United States is the possibility of smuggling European goods which have been brought through the United States in bond back into the United States. There is no doubt that a considerable amount of petty smuggling is done, both of these goods and of piloncillo, crude sugar, mescal, and a few other Mexican productions dutiable in the United States. I have no reason to believe that this is other than what could properly be termed a petty business.

Table A.—By this is shown the "internation," both to the interior and to other points in the Zona Libre for the five years by separate years ending September 30, 1881.

To each of these destinations are shown the packages of free, of dutiable, and total of packages, and also the duties paid or computed.

It is not possible to give the *values* of these goods, because most of the duties being specific the values are not necessary, and only the duties are expressed on the internation guias, from which these figures are taken.

By an examination of the totals at the end of the table it will be seen that there has been a steady increase in the number of packages sent to the interior, and, except in the second year, a steady increase in the duties paid at this custom-house on goods sent to the interior.

In those goods sent to other points inside the Zona Libre there is also shown a steady increase in the total of packages and the duties *computed* to same points each year except the second and the last.

The decrease in the second year, that ending September 30, 1878, is attributable in part to quarantine by the State of Texas against this city, and to bad roads from here to the interior.

The decrease to other points inside the Zona Libre for the last year is probably caused by the opening of the ports of Camargo and Mier to be ports of first entry, which took effect January 3, 1881, and was reported in my No. 146 of January 11, 1881.

To indicate the extent of the free list of the Mexican tariff, which as has been reported herein has been abolished, it is well to compare the number of packages of free goods with the packages of dutiable goods.

For the five years given, the total packages the contents of which were free of duty, is shown as being 24,283, while those paying duty amounted to 249,529, being about one free to every ten dutiable. Those sent to other points on the Zona Libre are seen to be 5,635 free to 46,572 dutiable, about in the proportion of one free to eight dutiable.

Taking these two sets of totals as the average range of the importations at this port for the past five years, we find that to each package of free goods were imported nine and one-half packages which paid duty.

Under the new law there will be no free goods.

The total duties paid during these five years are shown at $3,090,447.02, or about $618,089.40 per annum, and the duties computed but not paid by the reason of the Zona Libre laws amounted to $1,204,158.53, or $240,831.70 per annum.

Table B.—As from the reasons previously given it was impossible to give the *values* of the goods internated, and as these values were an important item, I have endeavored to remedy this defect by giving the estimate original invoice values. To obtain this estimate I have obtained data from the merchants in this city who do the most of this internation.

From a careful and exhaustive consideration of the general duties of each class of goods as well as the usual amounts of each internated, I have, unanimously with these merchants, adopted the rule which makes the internation duties 70 per cent. of the original European or American invoice value of all the goods free or dutiable which have been internated for the past five years. Columns 1, 2, and 3 of the table show: (1) The actual duties paid; (2) the actual duties computed; (3) the total paid and computed on the internations for these years; while columns 4, 5, and 6 show the estimated original values of goods sent to (4) interior, (5) to other points inside the Zona Libre, and (6) the total invoice values of said goods internated for these years. The totals of each for the five years are given as well as the average per annum. By these it appears that the total of the original invoice values of goods sent to the interior for the five years is $4,414,924, and to other points inside the Zona $1,720,226, a total of $6,135,150, an average of $1,227,030 per annum.

Table C.—For the purpose of showing further the values of this internation, I take in Table C, the estimated original invoice values of the goods internated for each year and reduce that to the local value in this city.

As in the estimates given in Table B, I have taken the advice of those best able to give information on the subject, and have also to acknowledge my indebtedness to several who have taken pains to compute, at considerable expense of time, the actual local cost of the various kinds of goods imported here.

From a series of careful computations in which the *known* amounts of importations of various classes, both from Europe and from the United States, were used as a basis, I place the average cost of laying down in this city the goods imported here, at 40 per cent., including the change to Mexican money. This is divided as 24 per cent. transport and other charges, and 16 per cent. change of money. While in many instances the cost is much greater, as in common crockery and glassware the cost is from 100 to 120 per cent., in rice from 90 to 100 per cent., and hardware from 70 to 80 per cent.; yet this estimate is, I believe, a reason-

able and proper one considering the whole five years and all classes of goods. By this we find a local cost of goods internated for the five years to be $8,589,211, an average of $1,717,842 per annum. Now, to give the value of the goods after the full duties have been paid or computed, I add these values to the known duties paid or computed, and thereto add 5 per cent. for commission, cartage, documents, &c., and make the total value of these goods on board carts, with duties paid and freights unpaid, at $13,528,007, or an average of $2,075,601, per annum.

Table D.—By this table we can arrive at some definite figures as to the possible amounts of goods which have been smuggled out of this city into the interior, and of those bonded goods smuggled back into the United States.

The first column gives the totals of the actual importations in original invoice values, the second column the local Zona Libre cost of same reduced to Mexican money by adding 40 per cent. The third column gives the total local Zona Libre cost of all goods internated before internation, and the fourth column the difference of the last two, which represents the local consumption and what has been smuggled. This amount of local consumption and smuggled is stated at $6,875,384, for the five years, or an average of $1,375,076 per annum.

As to the local consumption, this is too uncertain to be even estimated with any probable degree of accuracy.

The latest official census gave the population of this city and the outlying ranches in this jurisdiction at 16,000. This is probably much too high, and the actual population of the city might be safely calculated as being from 12,000 to 14,000. Placing it at 12,000, which I presume to be nearly correct, this gives an average annual consumption of foreign goods by the inhabitants of this city of $114.60 per head.

It must be noted that three-fourths of these consumers are very poor, and that at least 25 per cent. of them are of a class the poverty of which can hardly be understood in the United States.

Besides the consumption of foreign goods, they consume interior and local Mexican products.

The better classes probably use one dollar of local and interior products to two of foreign, while among the poorer classes the division is nearly, if not quite, equal.

It is hardly profitable to follow this discussion much farther, but it seems reasonably plain from the figures given that this smuggling cannot take very great proportions. As a rough estimate, I might say that I should not think the total smuggled out of this city for the last five years could run over a value of $250,000 per annum in Mexican coin, of which perhaps 20 per cent. might be of bonded goods smuggled into the United States. While this estimate might be fair as for five years, it is probably too high as concerns the last year or two.

WARNER P. SUTTON,
Consul.

UNITED STATES CONSULATE,
Matamoros, Mexico, January 22, 1882.

TABLE A.—*Statement showing the number of packages and duties paid on merchandise entered at the Matamoros custom-house for exportation to the interior of the republic from October 1, 1876, to September 30, 1881, both inclusive, by months and years; also of merchandise entered for transit to points within the Zona Libre for the corresponding dates, together with a statement of the number of packages the contents of which were free of duty.*

[Consular district of Matamoros.]

Dates.	For the interior.				For the Zona Libre on which duties, though computed, are not paid.			
	Packages free of duty.	Packages which pay duty.	Total of packages.	Duties paid.	Packages free of duty.	Packages duties.	Total of packages.	Duties computed.
1876.								
October*	96	3,735	3,831	$102,858 47	.....	.....	.....	.....
November*	10	4,037	4,047	72,088 61	.....	.....	.....	.....
December*	15	35	50	468 36	.....	.....	.....	.....
1877.								
January	1	11	12	26 44	16	.....	16	.....
February	34	1,159	1,193	7,984 77	.....	19	19	$60 37
March	566	4,356	4,922	55,276 26	22	952	974	28,030 68
April	580	9,840	10,420	74,582 49	526	1,624	2,150	52,791 30
May	233	3,088	3,321	39,547 00	77	952	1,029	21,941 15
June	547	5,519	6,066	47,477 76	102	590	692	12,002 70
July	182	1,304	1,486	15,110 29	60	467	527	17,301 45
August	319	4,011	4,330	56,054 30	8	569	577	12,137 97
September	109	1,105	1,214	27,454 97	1	399	400	9,997 51
October	428	2,974	3,402	38,388 50	.....	511	511	12,535 78
November	257	3,656	3,913	68,926 93	12	776	788	15,042 24
December	104	3,554	3,658	34,460 77	2	845	847	20,035 43
1878.								
January	291	2,172	2,463	45,665 15	165	783	948	20,288 44
February	357	3,215	3,572	39,737 51	195	238	433	4,452 77
March	337	1,945	2,282	32,798 36	353	517	870	12,812 97
April	1,166	5,302	6,468	55,457 96	191	276	467	3,584 09
May	268	4,642	4,910	31,024 11	169	328	497	3,594 35
June	416	2,813	3,229	23,818 27	10	264	274	5,809 04
July	420	2,972	3,392	37,232 65	10	229	239	3,292 60
August	200	5,108	5,308	36,981 03	59	612	671	26,408 53
September	12	4,541	4,553	12,223 28	2	505	507	11,134 01
October	780	6,657	7,437	56,487 79	2	653	655	15,789 24
November	500	3,090	3,590	19,756 13	207	1,014	1,221	22,165 20
December	129	3,746	3,875	64,056 49	3	533	536	14,020 08
1879.								
January	263	5,385	5,648	60,900 41	3	1,493	1,496	31,400 91
February	376	5,414	5,790	73,494 91	68	1,099	1,167	22,647 32
March	264	5,850	6,114	44,330 20	309	1,209	1,518	36,482 29
April	582	3,468	4,050	41,284 39	505	1,295	1,800	27,018 93
May	443	3,544	3,987	61,763 62	26	1,056	1,082	20,353 30
June	302	3,017	3,319	25,269 24	65	921	986	24,949 40
July	420	4,831	5,251	32,079 71	.....	954	954	33,211 15
August	318	2,503	2,821	39,622 48	74	428	502	16,396 50
September	503	3,737	4,240	81,645 42	122	648	770	18,786 89
October	473	3,405	3,878	38,077 29	10	614	624	15,151 35
November	575	6,119	6,694	51,217 32	62	956	1,018	27,181 92
December	287	4,753	5,040	45,614 49	241	1,602	1,843	31,816 13
1880.								
January	379	7,058	7,437	40,006 19	3	1,062	1,065	30,340 64
February	256	4,118	4,374	45,814 49	55	1,195	1,250	26,742 00
March	608	6,261	6,869	46,167 32	372	1,457	1,829	24,971 84
April	288	3,841	4,129	47,305 18	241	1,273	1,514	22,642 32
May	682	4,157	4,839	51,161 72	428	952	1,380	30,915 00
June	504	5,489	5,993	58,323 22	230	605	835	19,955 89
July	1,224	3,584	4,808	100,786 86	46	1,326	1,372	37,072 44
August	16	1,031	1,047	58,509 99	.....	316	316	4,091 56
September	1,344	2,274	3,618	71,616 98	22	1,290	1,312	50,006 63
October	221	3,029	3,250	58,016 81	3	554	557	20,348 41
November	272	4,494	4,766	43,218 45	2	1,242	1,244	29,754 90
December	610	6,027	6,637	45,590 41	24	1,241	1,265	55,069 68

TABLE A.—*Statement showing the number of packages and duties paid, &c.*—Continued.

Dates.	For the interior.				For the Zona Libre on which duties, though computed, are not paid.			
	Packages free of duty.	Packages which pay duty.	Total of packages.	Duties paid.	Packages free of duty.	Packages dutiable.	Total of packages.	Duties computed.
1881.								
January	379	4,024	4,403	42,022 76	34	1,034	1,068	36,694 09
February	594	4,229	4,823	59,037 77	.....	663	663	24,088 23
March	671	6,396	7,067	59,847 70	37	1,711	1,748	31,511 10
April	609	7,875	8,484	49,784 08	15	1,239	1,254	28,385 16
May	587	7,163	7,750	164,486 40	.....	872	872	24,958 70
June	570	7,264	7,834	185,112 10	202	376	578	9,791 72
July	337	4,865	5,202	38,558 71	7	921	928	14,761 12
August	476	4,884	5,360	61,814 44	236	1,254	1,490	26,221 04
September	493	4,853	5,346	72,021 31	1	58	59	4,312 07
Year ending September 30, 1877.	2,692	38,200	40,892	498,929 72	812	5,572	6,384	154,263 13
Year ending September 30, 1878.	4,256	42,894	47,150	456,714 52	1,168	5,884	7,058	138,990 25
Year ending September 30, 1879.	4,880	51,242	56,122	660,690 79	1,384	11,303	12,687	284,121 21
Year ending September 30, 1880.	6,636	52,090	*58,726	654,601 05	1,710	12,648	14,358	320,887 72
Year ending September 30, 1881.	5,819	65,103	70,922	879,510 94	516	11,165	11,726	305,896 22
Five years	24,283	249,529	273,812	3,090,447 02	5,635	46,572	52,207	1,204,158 52

*Port closed on account of revolution.

INTERNATION.

TABLE B.—*Comparative statement showing amounts of duties paid and computed to interior and to other points in Zona Libre, as compared with estimated original invoice values, duties being computed at 70 per cent. of original invoice values, for the five years ending September* 30, 1881.

[Consular district of Matamoros.]

Year ending—	To the interior (duties paid in Mexican coin).	To other points in Zona Libre (duties computed in Mexican coin).	Total duties paid and computed in Mexican coin.	To the interior (estimated original invoice value in United States coin).	To other points in Zona Libre (estimated original invoice value in United States coin).	Total estimated original invoice values in United States coin.
September 30, 1877	$498,929 72	$154,263 13	$653,192 85	$712,756 74	$220,375 90	$933,132 64
September 30, 1878	456,714 52	138,990 25	595,704 77	652,449 31	198,557 50	851,006 81
September 30, 1879	660,690 79	284,121 21	884,812 00	858,129 70	405,887 44	1,264,017 14
September 30, 1880	654,601 05	320,887 72	975,488 77	935,144 35	458,411 03	1,393,555 38
September 30, 1881	879,510 94	305,896 22	1,185,407 16	1,256,444 20	436,994 60	1,693,438 80
Total five years.	3,090,447 02	1,204,158 53	4,294,605 55	4,414,924 30	1,720,226 47	6,135,150 77
Average per annum	618,089 40	240,831 70	858,921 11	882,984 86	344,045 29	1,227,030 15

INTERNATION.

TABLE C.—*Statement showing* (1) *original invoice value in United States coin of all goods internated*; (2) *Zona Libre* cost in Mexican coin of the same*; (3) *the total duties paid and computed thereon, and also* (4) *the total value† of all goods internated when loaded on carts for the interior with full duties paid, and freight unpaid, Mexican coin; for the five years ending September* 30, 1881.

[Consular district of Matamoros.]

Year ending—	Original invoice of goods internated (United States coin).	Local cost of goods internated (Mexican coin).	Duties paid and computed on goods internated (Mexican coin).	Total value on carts, duties paid and freight unpaid, on goods internated (Mexican coin).
September 30, 1877	$933,132 64	$1,306 385 70	$653,192 85	$2,057,557 48
September 30, 1878	851,006 81	1,191,409 53	595,704 77	1,876,470 02
September 30, 1879	1,264,017 14	1,769,624 00	884,812 90	2,787,157 80
September 30, 1880	1,393,555 36	1,950,977 53	975,488 77	3,072,789 62
September 30, 1881	1,693,438 80	2,370,814 32	1,185,407 16	3,734,032 55
Total five years	6,135,150 77	8,589,211 08	4,294,605 55	13,528,007 47
Average per annum	1,227,030 15	1,717,842 21	858,921 11	2,705,601 49

*Local Zona Libre cost is found by adding 40 per cent. to original invoice value, being average cost of laying down in this city, including exchange to Mexican money.

†Total value when laden on carts is found by adding local cost and duties paid and five per centum thereon for local commissions, cartage, &c.

INTERNATION AND LOCAL CONSUMPTION.

TABLE D.—*Statement showing* (1) *total importations in United States coin*; (2) *the local cost of the same reduced to Mexican coin*; (3) *the local cost of all goods internated*; *and finally*, (3) *the local consumption, the last being obtained by obtaining the remainder of column* 2 *subtracted by column* 3; *for five years ending September* 3, 1881.

[Consular district of Matamoras.]

Year ending—	Total importations; original invoice values (United States coin).	Local cost of same (Mexican coin).	Local cost of all goods internated (Mexican coin).	Local consumption being local cost of all importation less local cost of all internated (Mexican coin).
September 30, 1877	$1,979,381	$2,771,133 40	$1,306,385 70	$1,464,747 70
September 30, 1878	2,317,612	3,244,656 80	1,191,409 53	2,053,247 27
September 30, 1879	1,965,105	2,751,147 00	1,769,624 00	981,523 00
September 30, 1880	2,176,772	3,047,480 80	1,950,977 53	1,096,503 27
September 30, 1881	2,607,370	3,650,318 00	2,370,814 32	1,279,503 68
Total five years	11,046,240	15,464,736 00	8,589,211 08	6,875,524 92
Average per annum	2,209,248	3,092,947 20	1,717,842 21	1,375,104 98

WAGES AND FOOD PRICES IN BRADFORD, ENGLAND.

REPORT BY CONSUL SHEPARD.

All factory hands, artisans, and mechanics have half holiday (from 1 o'clock) on Saturdays. On other days they work from 6 a. m., to 5.30 p. m., with half an hour for breakfast and 1 hour for dinner (56½ hours per week).

Warehousemen, 8 a. m. to 6 p. m.; Saturdays, 8 a. m. to 1 p. m.

The farm laborer is frequently allowed a house and a small bit of land upon which he raises what vegetables he uses; he works from 6 a. m. to 6 p. m. (with eating time); in winter till dusk.

A working man (single) can live for from $2 to $2.50 per week, and with a wife and five children may live (frugally) for from $5 to $6 per week.

The police work 9 hours per day.

Street sweepers work 54 hours in summer and 53 hours in winter. (Time for eating.)

Laborers and repairers of street paving work 49½ hours per week. (Time for eating.)

Gas-meter inspectors work 49½ hours in winter and 52½ hours in summer.

Gas stokers, 12 hours a day on duty, but actual time working about 7 hours per day, with time for eating.

Children employed in factories cannot work full time at the age of thirteen unless they have passed a certain standard, failing which they must attend school half time until they are fourteen years of age, when they become free from school attendance.

Wages of workmen.

Workmen.	Wages per day.	Wages per week.	Wages per year.
Railway employés:			
Station master			$350 to $600 and house.
Guard		$5 50 to $7 50	
Engine driver	$1 37 to $1 87		
Pointsman		5 50 to 6 00	
Stoker	87 to 1.00		
Porter		4 50 to 5 00	
Navvy	75 to 1 25		
Farm hands:			
Skilled hands		5 00 to 6 60	
Common hands		3 75 to 4 50	
Factory hands:			
General foreman for works of any kind	3 00 to 5 00		
Foreman	1 50		
Skilled hand, man	1 25		
Skilled hand, woman	75		
Common hand, man	87		
Common hand, woman	50		
Boy over 14		2 25	
Boy 10 to 14		1 12	
Girl over 14		2 50	
Girl 10 to 14		1 25	
Mechanic	1 25		
Artisan	1 25		
Cartman	1 00		
Warehouseman		6 00 to 8 00	
Collier			
Police force:			
Chief superintendent			2,500 and house.
Superintendents of division			700 to 750
Inspectors		8 75 to 10 00	
Sergeants		7 25 to 8 75	
Policemen		6 00 to 6 50	

[1] Average 50 cents per ton; at that rate usually make $1.50 a day.

Wages of workmen—Continued.

Workmen.	Wages per day.	Wages per week.	Wages per year.
Public works:			
Street sweepers	$0 83		
Laborers	80 87 to 95		
Repairers of street paving	1 10		
Gas-meter inspectors	1 00		
Gas stokers	1 00 to 1 25		

Articles of food and cost of same.

		Cents.
Beef, inferior parts	per pound	12 to 14
Beef, best joints	do	18 to 22
Mutton, according to joint	do	12 to 22
Pork, inferior parts	do	10 to 12
Pork, better parts	do	14 to 18
Bacon	do	16 to 20
Bacon, inferior	do	12 to 16
Veal, according to joints	do	16 to 25
Geese	do	16 to 25
Fowls	each	62 to 75
Ducks	do	62 to 75
Salmon	per pound	32
Cod	do	10
Turbot	do	28
Soles	do	20
Haddock	do	4 to 6
Flour	do	4½
Potatoes, old	per stone	37
Potatoes, new	per pound	5
Eggs (cooking)	per dozen	18
Eggs, fresh	do	25
Butter	per pound	36 to 42
Cheese	do	16 to 20
Cauliflowers, according to size	each	4 to 12
Cabbages	do	2 to 4

C. O. SHEPARD,
Consul.

UNITED STATES CONSULATE,
Bradford, England, February 21, 1882.

COTTON GOODS EXHIBITION AT AMSTERDAM.

REPORT BY CONSUL ECKSTEIN.

Referring to my dispatches Nos. 166 and 194, both relating to the international exhibition to be held at Amsterdam in 1883, I have the honor herewith again to offer a few observations on the subject.

In view of the great importance of the cotton-goods trade in the Dutch East India colonies, and apparent desirability to secure a share therein for our manufacturers and exporters, it is quite likely that there are some who may contemplate to avail themselves of the opportunity by participating in the forthcoming exposition.

Whilst it would be difficult, indeed, for me to predict to what extent, if to any, the best efforts of American industrials in this branch could or would be crowned with success in case of their making even the fullest display here, I cannot but think that the occasion offers an exceptionally favorable chance for testing that matter.

Doing so would, of course, involve submitting their claims of being able to compete with European manufacturers to parties interested in the trade in the colonies as well as to the regularly appointed judges.

If American cotton-goods manufacturers feel confident of the ability to obtain a favorable verdict for their products, they would be most likely thereby to insure immediately a certain foothold in the markets of that section of the world, and it would in this case seem most advisable that they should participate.

On the other hand, if, in their judgment, the time has not yet come for them to expect to compete successfully with foreign manufacturers, particularly the British, and especially in the prices of the goods, it would, perhaps, be preferable that they should make no attempt at all to be represented here.

According to information received from trustworthy sources it is the intention of many British manufacturers of cotton goods to make an extensive display of their wares here.

In the manufacture and preparation of cotton goods for exhibition here it will be necessary to have particular regard to quality, styles, and prices of the articles, as generally consumed and in demand in the "colonies."

Brown and bleached cottons, plain or twilled drillings, jeans, denims, striped shirtings, cambrics, silecias, &c., should, in width and length of pieces, be brought here suitable and as wanted in those markets.

Colored goods of every description, whether in plain or solid colors or figured, are all required to be of a certain width and length of pieces; and in addition thereto it is necessary to have them in such colors and patterns as are generally preferred there.

The main consideration, however, always is, and remains, the prices of the goods.

It should be borne in mind that the great bulk of cotton goods imported into the markets in question consist of a low grade or quite ordinary quality at correspondingly low prices.

To make and bring such goods a shade better, and hold them a trifle higher in price, prevents their being substituted for the slightly inferior but cheaper articles elsewhere obtainable.

In short, if the American cotton-goods manufacturers and exporters will produce and sell at all times the goods as they are wanted in the Dutch East India colonies at the same terms they can be purchased in Europe, especially England, there will be no difficulty whatever in establishing a considerable trade there.

Under such considerations they could speedily induce *Dutch* merchants to become their customers; and if it is true that American manufacturers can produce a better article than the English or German, and at a *lower* figure, it may confidently be expected that honest and cheap goods will be preferred to flimsy and adulterated materials, and will soon be substituted for them to a very great extent.

Again, it must not be inferred from the foregoing that only common and cheap goods should be exhibited here; on the contrary, if any cotton goods are to be brought here for this purpose it would, in my opinion, be well to bring, at the same time, some of every description, including the better and best fabrics.

I desire, however, to be explicitly understood that really material benefits can be expected to be derived only by demonstrating the capability on the part of American manufacturers to compete with others in producing and furnishing cotton goods adapted, especially as to quality, styles, prices, &c., for use in the colonies.

I am not in a position to advise American spinners to exhibit cotton yarns; they must themselves be the better judges as to whether so doing can conduce to their advantage. This will depend upon how they can compete with English spinners in supplying to any extent the manufacturers of cotton goods in this country.

D. ECKSTEIN,
Consul.

UNITED STATES CONSULATE,
Amsterdam, February 27, 1882.

COTTON AND COTTON MANUFACTURES IN CHINA.

REPORT BY CONSUL STEVENS, OF NINGPO.

The importation of American cotton goods into this port continues to a limited extent. It does not increase very fast, cheaper and poorer goods from the continent of Europe and England being seemingly preferred. The custom-houses of China are almost entirely filled by Englishmen; the secrets of the Chinese trade are known to them; they can post their friends at home, and do.

Nearly all the trade of this port is confined (outside of opium) to native hands, all the goods being imported under the commutation system; foreigners are entirely out of the trade. The commutation system is this: merchants club together and buy the right of all interior importation. By so doing the foreign merchant who only pays half duty, according to treaty, can be undersold. The taxes to the interior Lekins, as against one-half duty, is contracted for by a body of men, the officials being the recipients of the commuted amounts so placed, that it ranges below the one-half duty treaty charge for inland transit, and by this advantage, as a single instance the native commands entirely the markets of the interior; he can lay his goods down cheaper all round; it is a decided injustice to a foreign trader. Say what you will, no foreigner can take advantage of this commutation system; he can't get in it; it's a Chinese ring. If you are not in the ring you can't trade. This commutation system, like all rings and systems, has built up a monopoly, and so far as the cotton-goods trade of Ningpo is concerned, it is governed entirely by them. The Chinese are moving quietly but surely in adopting foreign ideas. It will not be in my judgment eighteen months from to-day till you will see in Shanghai one of the best cotton mills ever constructed and working. I trust I am not divulging a secret too soon when I say that all arrangements are made, money secured. An American expert builder of cotton mills is now in America, making the selection of the best machinery he can find for the working of the short-staple cotton of China.

The yield from the cotton fields in this district for the last two years has been very good. The fiber of the cotton, I am informed, is above the average; they are paying more attention to its cultivation. As yet the native inhabitants work it in the rudest way imaginable, and as a general thing it seems to me as though they preferred their native-made goods to foreign importation. I intended to embody in this report a tabular statement of the quantity and quality of the cotton raised in this district. The information is not in shape or complete, so I must leave it out. And by the way, here in the winter a Chinaman, especially

the poorer class, are more cotton than anything else; they are padded three or four inches thick all around. The reason they dress so warmly is, that they have no fire.

EDWIN STEVENS,
Consul.

UNITED STATES CONSULATE,
Ningpo, January, 1882.

TRADE AND COMMERCE OF GOTHENBURG.

REPORT BY CONSUL COOPER.

THE PORT OF GOTHENBURG.

In view of the constantly increasing business of this port, several new quays are building. The works are on a magnificent scale, and when completed will cost upwards of 4,000,000 Swedish crowns.

In order to prevent a recurrence of the suspension in the shipping business which happened in the severe winter of 1880–'81, when every effort to compass the ice embargo proved futile for three months and more, the authorities have recently ordered the construction of a large and powerful ice-breaking steamer, to be built of Motala Bessemer steel. It is expected that this formidable propeller or ram will be entirely adequate to the task of maintaining an open channel from the port to the sea in the severest winter.

In order to defray the expenses incident to the construction and operation of this steamer, the authorities have decided, that for a period of five years, every vessel, sail or steamer, inward or outward bound, from November first until April first, shall pay double the ordinary port charge.

EMIGRATION.

A large majority of the Swedish emigrants to the United States take the line of Gothenburg-Hull-Liverpool; and the largest number ever leaving Sweden in any one year sailed from this port in 1881, when the enormous number of 36,115 departed for the United States.

In the preceding four years, to wit, in the years 1877, '78, '79, '80, there emigrated from this port to the United States, respectively, 3,119, 4,380, 15,115, 33,459. During the same years there returned from the United States, respectively, 1,244, 995, 655, 795, 935.

From these figures it is apparent that the emigration from Sweden to the United States has been constantly increasing. The cause I have found to be, in the main, the very simple one, that emigrants are hopeful of bettering their condition in the United States. Nearly seven-tenths of those now emigrating receive either sufficient money or full-paid tickets from their prosperous relatives and friends in the United States.

The great majority of the emigrants are small husbandmen or miners with their families. From the cities, they consist, for the most part, of mechanics and maid servants, which latter class seek employment in American families. I have observed that the Swedish emigrant, as compared with emigrants from other countries, is physically more robust, temperate in his habits, and apparently well-to-do.

A project is on foot to establish a steamship line between Gothenburg

and the United States, having in view principally the business of transporting emigrants directly without the annoyance and expense attending upon the frequent transfer which is now necessary in making the long journey.

The project is difficult of realization for the reason that the Swedish emigrant law contains very stringent provisions respecting the space to be allotted to each emigrant. As the law now stands upon the statute books the enterprise could scarcely be made a paying one. The Swedish Government will not permit its emigrants to be treated as cattle. Accordingly the Board of Trade of Gothenburg, with a view to facilitating commerce, supported by the local government, has recently petitioned the general government at Stockholm for such modifications of the emigrant law as will make it correspond with the English law, which has been for a period of twenty-five years, as is well known, quite sufficient to meet every emergency. Should this petition meet with favorable considerations it will result, *ex necessitate*, that nearly all Swedish emigrants to the United States will make the voyage by the proposed Swedish line.

DUTIES.

The customs receipts amounted in the year 1881 to 7,860,737 Swedish crowns for merchandise imported, and for merchandise exported to the sum of 121,444 Swedish crowns, or to a total of 7,982,182 Swedish crowns.

The increase over the year 1880 amounts to 483,091 Swedish crowns.

THE HERRING FISHERY.

At the commencement of this century very large numbers of herring were yearly caught adjacent to the coasts of Bohus Län, and Gothenburg was the principal market place for the herring trade.

For some unexplained reason the fishery suddenly stopped in the winter of 1808, and never since have the herring approached the coast in such quantities that it was profitable to continue the fishery.

In the winter of 1877 the herring returned. The ichthyologists are of opinion that the same phenomena will occur at the expiration of every seventy or eighty years, for which sage opinion they furnish no adequate reason. Now, as before, Gothenburg is the principal depot for the herring fishery. The fishery of 1880–'81, commenced in October, and closed in the first part of February. The herring was of a better quality than the catches of the years 1878–'79, and were considered, if well cured and salted, to be of quite as good quality as the Norwegian and Scottish herring of the same years.

The average rate for the first quality amounted to 15 Swedish crowns, and for the second quality to from 9 to 10 crowns per 6 cubic feet for the salted article.

In all warehouses for salting there were preserved about 31,000 cubic feet of herring, and about 44,000 cubic feet were sent to Denmark and Germany in order to be smoked, and which thereafter appeared and were known as "red herring."

The rate by the nets for fresh herring amounted to 2 crowns per cubic foot at the beginning, but afterwards it was reduced to one crown in the average. The catch during the time mentioned amounted to 337,155 cubic feet.

With regard to the fishery that began in the first part of December 1881, and which still continues, it certainly has been very profitable,

but for lack of buyers the fishery at many stations has terminated. Although the herring was offered by the nets at such a low rate as 25 to 50 öre per 5 cubic feet, and in Gothenburg to 2 to 3 crowns per 8 cubic feet, it did not succeed in finding sufficient buyers, and therefore large quantities were used as manure. The merchants were afraid to take the same chances as in the years before, when there was little profit in this line of speculation, and the mild winter has also been harmful, because it has been very difficult to preserve the fresh herring from rot. The Swedes need experience in the American manner of packing, preservation, &c. In order to make this industry profitable, as in former years, large quantities of fresh herring have been sent to Germany and Denmark in order to be prepared as red herring. Salted herring are exported to Russia and Germany.

THE TRICHINA BUREAU.

In the autumn of 1881 the authorities concluded to establish a bureau in order that all bacon, fresh or salted, sold at the markets or in detail, should be examined before selling. From October 17, when the bureau began its work, 2 per cent. of the bacon examined was found to contain trichina.

GOTHENBURG'S REGISTER OF SHIPPING.

Gothenburg has a considerable navigation. The number of craft belonging to this port amounts to 136 sailing vessels, measuring 56,132.73 tons, and 66 steamers, measuring 28,728.96 tons, with 4,104 horse-power. A great many of the latter keep up a regular trade between the port of Gothenburg and England, France, Holland, Belgium, and the ports of the Mediterranean. Gothenburg also carries on a considerable commerce with Russia, England, and other countries. The exports principally consist of iron, wood, and oats.

THE TIMBER TRADE.

At the commencement of the year the timber trade was not active, and the dullness continued until late in the spring, because of the excess of stock in the docks of London. This excess continued until the latter part of the summer, when the amount of stock on hand, owing to heavy demands, became trifling as compared with the stock on hand at the same time in previous years. Speculation was, therefore, aroused, and during the autumn the rates advanced 15 per cent. as compared with the rates in the autumn of 1880.

A further advance, however, failed in consequence of the mild temperature, which permitted heavy shipments of timber from the Baltic ports at a time when they are generally closed by ice. The stock, therefore, increased in London, but not to such an extent as in the previous year.

The rates for deals in Gothenburg, in the commencement of the year, amounted to 32 crowns for 240 running feet, 3 by 9 inches; for 2½ by 7 inches, 16 crowns; by ending of the year, 37 and 18.50 crowns, respectively.

IRON.

A uniform and regular trade characterized the Swedish iron market during the year 1881. The rates were not very fluctuating. In the commencement the rates for assorted iron were fixed at 6.75 Swedish crowns

per cwt., but declined in the spring and summer to 6.25 crowns. In the autumn the rates advanced, and by the close of the year they were established at 6.75 Swedish crowns.

Pig-iron reached a low rate during the year mentioned, in consequence of the production exceeding the consumption at home, and but few foreign orders were received. In the commencement of the year the rate was fixed at 2.85 Swedish crowns per cwt., which rate generally prevailed until the autumn, when it rose gradually to 2.90 Swedish crowns per cwt.

The cause of the appreciation is to be found in the circumstance that business generally, not only in America, but also in Europe, has shown a marked improvement.

With regard to exports it must be remembered that a good deal of iron and steel is sent to England for reshipment to the United States, and of iron and steel shipped to Belgium a good deal is reshipped to France and Germany.

Iron and steel shipped from the port of Gothenburg during the year 1881 amounted in the aggregate to 125,048 tons against 117,779 tons in the year 1880.

The entire export of minerals shows an increase of 3,723 tons.

SEA-FISH MARKET.

The advantageous position of Gothenburg makes it a market place of the first order for the trade in sea-fish. Daily a squadron of boats arrives, and their cargoes are sold partly for this market and partly for transportation by railway to the interior. In the year 1881, the total valuation of market sea-fish amounted to 1,294,247 Swedish crowns.

SIGNAL STATION.

During the current year a telegraph and signal station has been established at Winga, a beacon and pilot post situated about 20 miles distant from Gothenburg. This has been done to favor the 80,000 vessels yearly passing near the beacon on their route to and from the North Sea and the Baltic.

IMPORTS AND EXPORTS.

During what is here styled the harvest year, beginning on the 30th day of September, 1880, and ending on the 30th day of September, 1881, at which latter date the export of the preceding year's crop generally is finished, the value of the exports amounted to 51,094,600, and the value of the imports to 34,439,000 Swedish crowns, or an excess in favor of the former of about 16,600,000 crowns. The exports are greatly in excess of the imports as compared with preceding years.

The total valuation of the export of oats shows a decrease in value of about 4 million crowns, it having declined from 32,750,000 to 28,548,000 Swedish crowns.

The exports of grain from Gothenburgh amounted to 4,677,441 cubic feet (oats, 4,618,533; beans, pease, and malt, 58,908), against 6,691,286 cubic feet in the year 1880.

SIDNEY W. COOPER,
Consul.

UNITED STATES CONSULATE,
Gothenburg, March 10, 1882.

POPULATION OF SWEDEN.

REPORT BY CONSUL COOPER.

Statement showing the population of the kingdom of Sweden at the close of the year 1880.

[From publications furnished by the statistical bureau at Stockholm.]

Localities.	Men.	Women.	Total.
Stockholm (Metropolitan)	75,216	93,559	168,775
Stockholms Län	71,587	75,434	147,021
Upsala do	52,800	58,219	111,019
Södermanlands do	72,203	74,983	147,186
Östergöthlands do	128,509	138,624	267,133
Jönköpings do	94,824	101,447	196,271
Kronobergs do	82,216	87,520	169,736
Kalmar do	119,891	125,214	245,105
Gottlands do	25,949	28,719	54,668
Blekinge do	66,406	71,071	137,477
Kristianstads do	112,137	118,482	230,619
Malmöhus do	170,742	178,568	349,310
Hallands do	65,532	69,767	135,299
Göteborgs and Bohus do	125,713	135,401	261,114
Elfsborg do	139,867	149,080	288,947
Skaraborgs do	125,488	132,454	257,942
Wermlands do	130,920	137,497	268,417
Orebro do	89,173	93,090	182,263
Westmanlands do	62,250	66,241	128,491
Kopparbergs do	92,145	97,988	190,133
Gefleborgs do	87,571	91,157	178,728
Westermorlands do	83,714	85,481	169,195
Jemtlands do	42,389	41,234	83,623
Vesterbottens do	52,614	53,821	106,435
Norrbottens do	45,387	45,374	90,761
	2,215,243	2,350,425	4,565,668
Whereof there are in the country	1,901,820	1,973,417	3,875,237
In all cities	313,423	377,008	690,431
Total	2,215,243	2,350,425	4,565,668
Cities counting more than 10,000 inhabitants:			
Stockholm (Metropolitan)	75,216	93,559	168,775
Gothenburg	34,987	41,414	76,401
Malmo	18,299	19,755	38,054
Norrköping	11,771	14,964	26,735
Gefle	8,787	9,971	18,758
Karlskrona	8,536	9,764	18,300
Jönköping	7,191	8,956	16,147
Upsala	6,679	8,996	15,675
Lund	6,270	8,034	14,304
Orebro	5,218	6,567	11,785
Helsingborg	5,353	6,197	11,550
Kalmar	5,058	5,905	10,963

SIDNEY W. COOPER,
Consul.

UNITED STATES CONSULATE,
Gothenburg, March, 1882.

A FLOATING COMMERCIAL EXHIBITION.

REPORT BY CONSUL TANNER, OF LIEGE, BELGIUM.

A "new departure" in the commercial field has been inaugurated in England, and has received such support from representative trading establishments as to make its success already assured. This is nothing less than a "floating commercial exhibition."

The promoters of this scheme now announce that early in May next the first stage of their enterprise in commercial action will be consum-

mated. In other words, "it is confidently anticipated that by that time, or, at the latest, early in June, a magnificent vessel will be ready for the inspection of intending exhibitors, and for the receipt of their goods. The primary object of this undertaking is to afford manufacturers, patentees, and others a cheap, expeditious, and effective means of bringing samples of their various specialties under the notice of buyers and others, in a manner direct and commodious, the title of the undertaking suggesting the means.

Of the thousand and one suggestions made, time out of mind, for the promotion of commerce and for the introduction of our specialties, this scheme, it seems to me, would not only recommend itself to our business men, but deserves the attention of Congress, as it is claimed and conceded that we have a greater quantity of novelties of superior make than other nation in the world, that only desires to be known to be wanted, and this method affords an easy introduction to the thousands and millions who do not go abroad to exhibitions, or, if they do, are bewildered by the multitude of things they see.

I shall offer no further comments, being assured that if the method above mentioned is practical and good, our business men will not allow it to escape them.

GEO. C. TANNER,
Consul.

UNITED STATES CONSULATE,
Liege, March 31, 1882.

RUSSIA'S BEET-ROOT SUGAR TRADE IN 1880–'81.

REPORT BY CONSUL-GENERAL STANTON, OF ST. PETERSBURG.

Governments.	No.	Quantity.	Value.	Laborers.	Insured value.	Excise.
		Tons.				
Kief	65	84,384	$10,990,865	24,011	$12,322,500	$575,156
Podolien	50	44,347	4,978,585	15,946	8,403,100	383,654
Charkoff	21	*23,195	*2,577,750	8,243	2,658,750	182,380
Tshernigoff	14	4,629	585,440	5,187	1,062,100	73,499
Kursk	12	*13,695	*1,525,315	4,925	1,672,500	110,015
Volhynien	11	12,254	1,525,315	5,175	2,786,300	90,673
Voronesh	7	2,455	338,245	1,969	482,500	29,287
Tamboff	5	2,962	425,925	1,475		34,695
Tula	3	3,018	480,700	1,440		39,300
Poltava	2	801	97,150	538		8,924
Pensa	2	440	95,246	375		4,431
Bessarabia	1	504	60,200	580	1,429,000	4,728
Orel	1	203	27,120	170		4,375
Mohileff	1	145	28,236	190		2,168
Minsk	1	*43	*4,780	88		345
Total Russia	196	193,075	23,740,872	70,312	30,816,750	1,543,630
Warsaw	19	*14,551	*2,182,500	*[1]1,708	1,900,000	183,268
Kalish	5	*2,206	*275,753	*[2]388	500,000	27,870
Lyublin	4	1,994	285,700	1,595	615,950	24,054
Radom	3	1,277	184,596	617		17,544
Kyeltzl	2	1,186	155,184	*[3]384		17,748
Peterkoff	2	*1,114	*139,394	131		15,535
Lomsha	2	652	85,135	250	1,418,050	5,950
Plotsk	2	1,258	139,750	550		15,834
Syedletz	1	*462	*51,340	*[4]84		5,817
Total Poland	40	24,700	3,499,352	*[5]5,707	4,434,000	313,620
Grand total	236	217,775	27,240,224	*[6]76,019	35,250,750	1,857,250

* Calculated on the estimated capacity of works.
[1] Actually in 1879–'80, 9,683. [2] Actually in 1879–'80, 1,552. [3] Actually in 1879–'80, 685. [4] Actually in 1879–'80, 380. [5] and [6] actually in 1880–'81, 22,879 and 93,190.

From the foregoing table it will be seen that during the season of 1880–'81 there were in operation in all Russia 236 sugar works, 196 being in Russian and 40 in Polish Governments.

It has hitherto been the practice of the Russian Imperial Government to estimate, from existing data, the capacity of a sugar mill, and to collect the excise duty on the estimated—without regard to the actual—production.

According to this established rule there were 83,846 tons (4,658,146 poods) of sugar produced, viz, 69,824 tons (3,879,129 poods) in the Russian and 14,022 tons (779,026 poods) in the Polish Governments. The excise duty collected amounted to $1,857,250.

In consequence of the introduction of more perfect apparatus the actual exceeds by far the estimated production.

Thus in the Russian the relation of the established standard to the actual production was as 1 to 2.7664, and in the Polish Governments as 1 to 17.653, so that the actual production of sugar was 217,861 tons (12,103,415 poods), the Russian Governments producing 193,163 tons (10,731,295 poods), and the Polish 24,698 tons (1,372,120 poods).

The value of the production was $27,236,690, viz, $23,737,286 for the Russian and $3,499,208 for the Polish works.

This great difference between the estimated and the actual production has called forth a decree whereby the excise duty is henceforth to be collected on the actual production, at first at a lesser, later at an increased, rate. It is believed that this change of system, which has already increased the price of sugar, will treble the government's receipts.

The buildings and machinery of Russia's beet-root sugar manufactories are insured for $35,250,750 (of which $30,816,750 are on Russian and $4,434,000 on Polish mills), which is an evidence of the magnitude of this branch of industry.

There were 93,190 laborers of both sexes employed, viz, 70,312 in the Russian and 22,879 in the Polish works.

Many mills are largely engaged in cultivating the beet-root, whilst others depend entirely on others for their raw material.

In the Russian Governments the manufacturers cultivated themselves 240,967 acres of beet root, which yielded 1,327,697 tons—7,376,098 berkovets—being an average yield per acre of 5.5 tons. Besides their own production the manufacturers purchased 1,105,947 tons for $3,763,892, the average price per ton being $3.43.

Assuming that the other producers obtained an equal average yield with the factories they would have cultivated 201,560 acres, with a return per acre of $18.86, to which should be added the value of the leaves and pressed roots returned by most of the factories.

From this will be seen how great is the agricultural importance of the beet-root sugar trade in Russia, to which, in fact, many of the provinces owe their prosperity exclusively. Altogether there were 442,527 acres devoted to the culture of the beet root. About 34⅛ per cent. of the mills are the property of stock companies.

RUSSIA'S FOREIGN COMMERCE IN 1880.

Russia's foreign commerce in 1880 was, according to the New Times, not propitious, as is evident from the very sensible decrease of the amount of exports, viz:

In 1880	$249,336,219
In 1879	313,884,222
In 1878	309,082,842
In 1877	263,967,913

The imports were, on the contrary, unusually large, being to that date unsurpassed, viz:

In 1880	$311,405,936
In 1879	293,856,613
In 1878	297,791,096

The balance of trade in 1880 was consequently $62,069,717 against Russia.

Although, in consequence of the acknowledged inaccuracy of Russian statistics, the foregoing figures may not be accepted as indisputable, they are sufficiently accurate to demonstrate the sad condition of Russia's commerce, which is still more perceptible in the excessive drain of precious metals across the Russian frontiers.

Without considering the gold carried abroad by the 864,175 travelers who crossed the frontiers in 1880, there were exported during this year $8,250,000 more precious metals than were imported, and in 1881 this export was still greater.

In 1881 only the European commerce has largely decreased, that with Finland and Asia having greatly increased. With western nations the export trade decreased 34.83 per cent. in cattle, horses included, and increased 3.58 per cent. in raw materials, and 4.67 per cent. in manufactured goods.

The export of forest products and metals is striking, being $16,500,000 for the one and $8,250,000 for the other. The latter amount is, however, in a measure accidental, and was the result of an enormous speculative export of old iron rails to the United States.

There is also a disproportion manifest in the import trade with countries of the Orient.

The import of raw materials for Russian factories decreased 10.71 per cent. notwithstanding an increased import of metals. Free goods, on the contrary, increased 10.32 per cent., alimentary articles 38.72 per cent., manufactures 13.16 per cent. This increase was due to a desire to avoid the provisions of the law taking effect January 1, 1881, which levied an additional 10 per cent. duty on all merchandise after that date.

The increase of the import of metals was due to the large quantity of pig-iron imported in 1880, viz, 270,000 tons, or about the same amount as is produced in the Ural districts.

In general the first place in the import trade of 1880 belongs to the products of the mining metallurgical industries.

There were imported in this year—

Metals	$30,867,392
Petroleum	2,036,143
Salt	3,080,565
Coal	8,802,290
Metallic wares	9,457,121
Machines	22,907,752
Agricultural machines	2,751,216
Total	79,902,479

Thus nearly $40,000,000 were spent in the purchase of articles, four-fifths of which could have been mined or made in Russia.

The trade of 1880, taken by districts compared with 1879, suffered the following modifications:

	Per cent.
In the White Sea: Exports decreased	2.16
Imports decreased	17.07
In the Baltic Sea: Exports decreased	13.74
Imports increased	1.37

	Per cent.
In the southern ports: Exports decreased	33.02
Imports increased	12.44
Across the land frontier: Exports decreased	19.38
Imports increased	7.37
With Caucasia: Exports increased	20.73
Imports decreased	10.23
In Astrachan: Exports increased	15.31
Imports decreased	6.22
With China and Amoor province: Exports increased	27.14
Imports increased	19.89

EDGAR STANTON,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
St. Petersburg, February 2, 1882.

THE SUGAR CROP OF PORTO RICO.

REPORT OF CONSUL CONROY, OF SAN JUAN.

I have the honor to give herein some information regarding the present state of the sugar crop in this island compared with former years.

The news from all the sugar districts is very satisfactory with regard to the yield of this year's crop, as a large increase in the production is expected.

The exportation of sugar from the various ports of this island during the year 1881 amounted very nearly to 90,000 hogsheads, which, calculated at 1,400 pounds net each, are the equivalent of 56,000 English tons; this result is about equal to the production in the year 1877, and shows an increase of 1,200 hogsheads, or 7,500 tons, on the total exported in 1880, which was the poorest for the last 25 years. The total yield of the present crop, it is expected, will exceed that of last year about 40,000 hogsheads.

Such increase in the production of the canes will serve to improve to a certain extent the present position of these sugar planters, as it will somewhat compensate for the low prices ruling now for said produce. It cannot, however, be said that this remarkable difference in favor of the production this year is caused by any material improvement in the cultivation or augmentation of the plantations, or even on account of the better system for the elaboration of sugar, as nothing whatever has been done to better the normal condition of the country in the agricultural line. Such large difference is simply owing to the good conditions of the soil favored by fair weather. During the last ten years the agricultural interest in this island has suffered considerably; many sugar estates were abandoned, and the crop, formerly of more than 100,000 tons, is now reduced to only 50,000 tons; but it seems likely that this island, with its natural resources, the fertility of its soil, and a good management, if planters are induced by better prices to give more attention to the planting and cultivation of canes, may yet be yearly augmenting its production of sugar, of which produce a considerable part is shipped to the United States.

The exportation of sugar from this port during this month (March) has been as follows:

To the United States, 584 hogsheads and 2,352 bags.

To England, 328 hogsheads.

To the British Channel for orders, 230 hogsheads.
To the British North American provinces, 254 hogsheads.
To Spain, 1,375 bags.
To the island of Cuba, 462 bags.
To St. Thomas, 38 hogsheads and 208 bags.
Total exported, 1,434 hogsheads and 4,397 bags.

Of above exportations, those for the United States have been all by English vessels. Those for England and British Channel for orders, by Spanish steamers, 228 hogsheads; by Danish sailing vessels, 320 hogsheads. Those for British North American provinces by English sailing vessels. Those for Spain, Cuba, and St. Thomas, by Spanish vessels.

I have been unable to get in time the note of exports from the other ports of the island, but I beg to say that sugar-making is rapidly progressing in all districts, and pretty considerable shipments of produce are being made. The weather is fair all over the island.

EDWARD CONROY,
Consul.

UNITED STATES CONSULATE,
St. Juan, Porto Rico, March 30, 1882.

THE FOREIGN COMMERCE OF AUSTRIA.

REPORT BY MR. DELAPLAINE, SECRETARY OF LEGATION AT VIENNA.

The official statements relative to the foreign commerce of Austria-Hungary in the year 1881 have now been published. They exhibit a satisfactory development both of the productive resources and of the manufacturing industry of the country, together with an increased general traffic. While the imports are large, the exports have augmented in much greater degree.

A comparison of values during the last six years is shown in the following table, expressed in millions of florins:

Year.	Imports.	Exports.	Plus exports.
1876	534.3	595.2	60.9
1877	555.3	666.6	111.3
1878	552.1	654.7	102.6
1879	551.4	675.1	123.7
1880	613.4	679.6	66.2
1881	647.0	715.8	68.8

It appears that since 1876 the imports have increased by 112,700,000 florins, and the exports by 120,600,000 florins. As compared with the previous year, the increase of imports has been 33,600,000 florins, and of exports 36,200,000 florins; thus presenting a surplus amounting to 2,600,000 florins.

In reference to the statement for 1879, it is proper to remark that the large surplus of exports in that year is to be ascribed to the extraordinary harvest in 1878.

The value of imports of the precious metals, and of gold and silver coins in 1881, being 32,860,148 florins, exceeded the export, 2,528,882, by 30,331,266 florins, while in the year 1880, with imports of 29,350,735 flor-

ins, and exports of 18,674,516 florins, the surplus of imports amounted to 10,676,219 florins.

In custom-house duties and fees, the collections during 1881 were in gold 9,294,424 florins; in silver 24,126,035; and in bank notes 165,389 florins, forming a total amount of 33,585,848 florins. In the previous year, 1880, the collections were in gold 7,767,175; in silver 22,263,336; in bank notes 181,310 florins, forming a total amount of 30,211,821 florins.

After allowance of the premium on gold, an increase of about 3,700,000 florins in Austrian currency is the result.

J. F. DELAPLAINE,
Secretary of Legation.

UNITED STATES LEGATION,
Vienna, April 3, 1882.

QUICKSILVER AND VERMILION IN CHINA.

REPORT BY CONSUL ZUCK, OF TIEN-TSIN.

Having been informed that the United States was largely shipping quicksilver to China, and that it was chiefly used in the manufacture of vermilion, and that the vermilion manufactured in China was of superior color and quality to that manufactured elsewhere, I have taken the trouble to collect the data on the subject of imported quicksilver, and also on vermilion, both native and imported.

The following tables were carefully compiled from the customs returns on trade for the year 1880, there being no later complete returns published. On an examination of Table No. 1, it will be seen that there were only 87.47 piculs,* of the value of 4,327 H. K. taels, imported directly to Chinese ports; but the amounts imported from Hong-Kong and Chinese ports presumably come mostly from Hong-Kong and from foreign countries to that port, as that is a port of direct shipment, and quicksilver is not a product of the place. This 4,023.08 piculs, of the value of 179,667 H. K. taels, added to the amount shipped direct from foreign countries to Chefoo, Shanghai, and Amoy of 87.47 piculs, of value 4,327 H. K. taels, and we have 410.55 piculs, valued at 183,994 H. K. taels, as being the true net imports rather than that given in the two last columns of the table; for, as shown by the table, there were only re-exported to foreign countries outside of that re-exported to Chinese ports and Hong-Kong .03 picul, valued 1 H. K. tael.

There being no trade in native quicksilver, it follows that the vermilion as shown in Table No. 3 was manufactured from imported quicksilver. Table No. 2 shows that there were no direct shipments of foreign vermilion into Chinese ports, but, for the reason above given, it is but reasonable to presume that the amount of 1,306.54 piculs, of the value of 59,687 H. K. taels, imported from Hong-Kong and Chinese ports, come from foreign countries direct to Hong-Kong. The table also shows that of this amount imported none was re-exported to foreign countries, but was distributed to the various Chinese ports, as shown in columns 2 and 3 of the table.

On comparison of Tables 3 and 4 it appears that Shanghai, as shown in Table 3, re-exported to Chinese ports alone 1,289.63 piculs, valued at

* The picul equals 133⅓ pounds; the H. K. tael equals $1.38.

79,957 H. K. taels, and, as appears by Table 4, re-exported to foreign countries, Hong-Kong, and Chinese ports altogether only 1,318.18 piculs, valued at 81,727 H. K. taels, leaving but 29.55 piculs, valued at 1,770 H. K. taels, which presumably went to Hong-Kong for local consumption.

We have as a result that China receives of foreign quicksilver $4.110\frac{55}{100}$ piculs, valued at 183,994 H. K. taels, and of foreign vermilion 1,306.54 piculs, valued at 59,687 H. K. taels, and that of the quantity of foreign quicksilver received there is manufactured in Hong-Kong and Chinese ports the net quantity of vermilion of 4,633.78 piculs, valued at 117,028 H. K. taels.

It will also be seen that China is a large consumer of foreign vermilion as well as of quicksilver, and that if it be a fact that the vermilion manufactured in China is of a superior quality, could it not be a source of greater profit to those engaged in the manufacture of vermilion in the United States to secure the services of those who have this art in China, and manufacture it at home. By so doing they would create a greater demand for vermilion, not only in China but in other foreign countries.

JAS. C. ZUCK,
Consul.

UNITED STATES CONSULATE,
Tien-tsin, February 13, 1882.

1.—*Trade in foreign quicksilver, imports and re-exports.*

Ports.	Imports from foreign countries.		Imports from Hong-Kong and Chinese ports.		Re-exports to foreign countries.		Re-exports to Chinese ports and Hong-Kong.		Total net imports.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Piculs.	*H. K. taels.*	*Piculs.*	*H. K. taels.*	*Piculs.*	*H. K. taels.*	*Piculs.*	*H. K. taels.*	*Piculs.*	*H. K. taels.*
New Chwang	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tientsin	.....	.....	87.18	3,828	.....	.....	.....	.....	87.18	3,828
Chefoo	16.87	1,361	8.43	398	.....	.....	5.62	284	19.68	1,475
Tchang	.....	.....	253.68	14,844	.....	.....	.....	.....	253.68	14,844
Hankow	.....	.....	1,444.00	65,529	.....	.....	253.67	11,947	1,190.33	53,582
Kinkiang	.....	.....	1.12	120	.....	.....	.....	.....	1.12	120
Wuhu	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chinkiang	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Shanghai	56.26	2,321	1,120.70	46,229	.....	.....	1,782.30	78,520	.....	.....
Ningpo	.....	.....	2.80	140	.....	.....	.....	.....	2.80	140
Wenchow	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Foochow	.....	.....	49.12	2,334	.....	.....	.....	.....	49.12	2,334
Tamsui—Formosa	.....	.....	4.72	318	.....	.....	.....	.....	4.72	318
Takow—Formosa	.....	.....	.....	1,503	.....	.....	.....	.....	.....	1,503
Amoy	14.34	645	397.73	17,722	.....	.....	.....	.....	412.07	18,367
Swatow	.....	.....	12.60	553	.....	.....	.....	.....	12.60	553
Canton	.....	.....	634.85	25,877	0.03	1	.....	.....	634.32	25,876
Kiungchow	.....	.....	6.65	272	.....	.....	.....	.....	6.65	272
Pakhoi	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	87.47	4,327	4,023.08	179,667	.03	1	2,041.59	85,751	2,674.27	123,212

No trade in native quicksilver.

2.—*Trade in foreign vermilion, imports and re-exports.*

Ports.	Imports from foreign countries.		Imports from Hong Kong and Chinese ports.		Re-exports to foreign countries.		Re-exports to Chinese ports and Hong Kong.		Total net imports.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Piculs.	*H. K. taels.*	*Piculs.*	*H. K. taels.*	*Piculs.*	*H. K. taels.*	*Piculs.*	*H. K. taels.*	*Piculs.*	*H. K. taels.*
New Chwang			342.44	26,387					342.43	26,387
Tientsin			23.	1,380					23.	1,380
Chefoo										
Ichang										
Hankow			700.99	20,903					700.99	20,903
Kinkiang			20.32	1,742					20.32	1,742
Wuhu			21.98	1,173					21.98	1,173
Chinkiang			191.82	7,816					191.82	7,816
Shanghai										
Ningpo										
Wenchow			6.00	286					6.00	286
Foochow										
Tamsui—Formosa										
Takow—Formosa										
Amoy										
Swatow										
Canton										
Kiungchow										
Pakhoi										
			1306.54	59,687					1306.54	59,687

3.—*Trade in native vermilion, imports and re-exports.*

Ports.	Imports from Chinese ports.		Imports from Hong Kong.		Re-exports to Chinese ports.		Re-exports to foreign countries and Hong Kong.		Total net imports.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Piculs.	*H. K. taels.*	*Piculs.*	*H. K. taels.*	*Piculs.*	*H. K. taels.*	*Piculs.*	*H. K. taels.*	*Piculs.*	*H. K. taels.*
New Chwang	79.74	3,602	11.50	522					91.24	4,124
Tientsin	133.33	8,891							133.33	8,891
Chefoo	49.44	2,961	8.65	519	20.00	1,200			38.09	2,280
Tchang										
Hankow	41.28	1,254			0.90	50			40.38	1,204
Kinkiang										
Wuhu										
Chinkiang										
Shanghai	309.49	19,188	1,898.50	117,707	1,289.63	79,957	28.55	1,770	889.81	55,168
Ningpo	2,766.97	15,715			1.14	6	22.60	147	2,743.23	15,562
Wenchow										
Foochow			278.25	11,222					278.25	11,222
Tamsui—Formosa			50.71	2,179					50.71	2,179
Takow—Formosa										
Amoy			38.37	2,040					38.37	2,040
Swatow			251.89	10,845					251.89	10,845
Canton			21.85	922					21.85	922
Kiungchow			17.63	789					17.63	789
Pakhoi			39.00	1,802					39.00	1,802
	3,380.25	51,611	2,617.35	148,547	1,311.67	81,213	51.15	1,917	4,633.78	117,028

4.—Trade in native vermilion, export and re-export.

	Quantity.	Value.
	Piculs.	H.-K. Taels.
Native vermilion, re-export to foreign countries, Hong-Kong and Chinese ports	28.00	1,260
Native vermilion, re-export to foreign countries, Hong-Kong and Chinese ports	1,310.15	81,725
Total	1,338.15	82,985

TRADE OF THE TYNE.

REPORT BY CONSUL JONES, OF NEWCASTLE.

Another bad harvest season and special depression in chemical manufactures have greatly lessened the home purchasing power of this country; nevertheless, trade in the north of England has continued to improve during the year 1881, and is now in a prosperous and buoyant condition.

CHEMICALS.

The chemical trade has been growing "from bad to worse" for several years. Prices have fallen to an extent which is all but incredible. Manufacturers are undoubtedly working at a loss, failure has overtaken many firms, and thousands of workmen engaged in this trade have shared in the consequences of the depression. This unsatisfactory state of things has arisen—

1st. From over-production; and

2d. Because the old Leblanc process of making carbonate of soda is being hardly pressed, if not, indeed, superseded, by Solway's patent, or the ammonia process. It is generally held that the Leblanc method has one great advantage; it utilizes the two elements of salt, viz, sodium and chlorine. The ammonia method, on the contrary, can only deal with sodium, but it certainly does in the most effective manner, and brings to market a purer and cheaper article in all the various forms of carbonate of soda than the old or Leblanc system. But Solway's method loses the chlorine, which is the bleaching agent in bleaching powder (or chloride of lime). Bleaching powder is the cheapest oxidizing agent; it is as necessary to the world as lead and iron, and can only be obtained now through the Leblanc process. Under these circumstances it is difficult even to venture a forecast regarding the future of the chemical trade. Meanwhile, many small manufacturers by the Leblanc process have been obliged to suspend both work and payment, and even the larger manufacturers are working at a positive loss.

The Newcastle chemical works, having a capital of £450,000, have just issued their balance-sheet for last year; it shows a loss of £15,000, and reflects the general state of the trade even under favorable conditions.

The Solway process will doubtless be utilized in the United States, where the cheap ammonia and salt springs will place it upon the most favorable and advantageous terms for competition with this country.

The present demand for all kinds of chemicals is certainly good, and stocks are light for this season of the year. But while the prices offered still involve loss instead of profit, manufacturers limit the production as

far as they can, and would "lay in" their works entirely, but for the destructive consequences of such a step.

The following statement, showing the fall in the prices of chemicals in ten years, renders it easy for us to appreciate that manufacturers are at present working at a loss:

Rates.	Soda crystals.	Soda ash.	Bleaching powder.
	£ s. d.	£ s. d.	£ s. d.
Price per ton January, 1872	5 0 0	11 0 0	12 0 0
Price per ton January, 1882	2 10 0	5 0 0	4 0 0
Fall in price per ton since 1872	2 10 0	6 0 0	8 0 0

The present prices are simply ruinous, and the answer of a sagacious chemical manufacturer to my inquiry regarding the future was, "I can't see the light."

EXPORTS.

With the exceptions stated, I believe that all branches of commerce and manufacture in this district are enjoying a measure of prosperity not experienced since 1874. The price of coal is advancing, while the unprecedented quantity of 8,194,578 tons was shipped during the year just closed.

The exports of general merchandise also have largely exceeded those of the previous twelve months, chemical manures, &c., furnishing an increase of 30,000 tons; cement, 9,300 tons; copper, 6,000 tons, fire-bricks and fire-clay goods, 14,000 tons; pig and manufactured iron and steel, 29,000 tons; timber, 2,000 loads; and lead and lead paints, 1,200 tons. Exports to the United States show an increase of 30 per cent. in soda crystals, 60 per cent. in cement, and 14 per cent. in pig-iron. But tables are submitted which will illustrate the state of trade clearer and with greater simplicity than words.

IMPORTS.

The panic of last spring in the American bacon trade has entirely disappeared; the dread of trichinæ is gone; and notwithstanding the serious check which the trade received, the imports of American meats, during 1881, show the substantial increase of 125.72 per cent. over the preceding year. The imports of beef, pork, bacon, butter, and cheese to this port, during 1881, show a total of 28,700 tons, or 8,600 tons more than in 1880; cattle 56,400 head, or 5,000 head more than in 1880; grain, 776,000 quarters, or 27,000 quarters more than in 1880; timber, 272,000 loads, or 41,800 loads more than in 1880; iron and iron ore, 550,700 tons, or 84,400 tons more than in 1880; copper, copper ore, &c., 15,400 tons, or 7,500 tons more than in 1880; lead and lead ore, 37,200 tons, or 3,700 tons more than in 1880; oils, 15,000 tons, or 4,500 tons more than in 1880.

FAIR TRADE.

With the return of prosperity the Fair-Trade party gradually retreats from political contest. It never had any real strength or backbone in the country. It was established upon the assumption that "the colonies" would join the "Fair-Trade Alliance," a circumstance which revives the

old joke concerning Charles II and the Royal Society. The King set the men of science to ascertain why it was that a fish weighed less in water than out of it. After many days wasted in far-fetched speculation, some one mustered enough courage to question the truth involved in His Majesty's proposition, and suggested that the fish should be consulted in the matter. The Fair-Trade party has assumed that the colonies would join the reciprocity compact. If some one took courage to consult the province of Victoria upon the matter the dream and delusion would soon be ended. A second and equally groundless assumption of Fair-Traders is this, that the manufacturing population will tamely submit to a duty upon food supplies, and that the agricultural classes will agree to a duty upon manufactured articles. The party was established upon unwarrantable assumptions; it never had any power in the country, and American producers have nothing to fear from this short-lived party. Potatoes are being exported from the Tyne to the United States, a question of more moment to our farmers than is likely to arise out of the Fair-Trade agitation.

EVAN R. JONES,
Consul.

UNITED STATES CONSULATE,
Newcastle, February 21, 1882.

Principal articles showing increase of imports from United States during 1881.

Articles.	1881.	1880.	Increase.	
			Tons.	Per cent.
Phosphates.....tons..	9,669	4,860	4,809	98.95
Oil.....do....	5,089	1,536	3,553	224.15
Beef, pork, and bacon.....do....	13,507	5,984	7,523	125.72
Flour and meal.....do ...	10,394	9,597	797	8.30
Wheat.....quarters..	224,019	213,309	10,710	5.02
Maize.....do....	108,332	96,682	11,650	12.06
Timber.....loads..	16,243	11,250	4,993	44.38

Principal articles showing increase of exports to the United States during 1881.

Articles.	1881.	1880.	Increase.	
			Tons.	Per cent.
Soda crystals.....tons..	16,691	12,812	3,879	30.28
Lead colors.....do....	282	278	4	1.44
Pig iron.....do....	34,212	29,937	4,275	14.28
Bar, plate, sheet, and rail iron.....do....	818	344	474	137.79
Cement.....do	1,637	1,026	611	59.55

NAVIGATION AT HAMBURG.

REPORT BY CONSUL BAILEY.

I have the honor to transmit herewith five tables compiled from the official statistics of Hamburg, as follows:

First. Showing the nationality or flags of the sea vessels that departed from Hamburg, years 1878, 1879, and 1880, with tonnage.

Second. The arrivals at the port of Hamburg for the same years.
Third. The several countries to which said vessels sailed.
Fourth. The several countries from which said vessels sailed.
Fifth. The arrivals and departures of river vessels at port of Hamburg.

J. M. BAILEY,
Consul.

UNITED STATES CONSULATE,
Hamburg, January 31, 1882.

No. 1.—*Nationality or flags of the sea vessels departed from the port of Hamburg.*

Flag.	1878.		1879.		1880.	
	Number of vessels.	Total tonnage.	Number of vessels.	Total tonnage.	Number of vessels.	Total tonnage.
Argentine			1	171		
American (U. S.)	26	21,147	17	16,542	12	14,286
Belgian	10	5,801	6	3,488	4	1,891
Chilian	1	808				
Costa Rica						
Danish	101	21,743	87	17,992	100	21,449
German	2,184	781,749	2,402	877,327	2,654	1,020,868
French	134	61,637	102	49,259	89	45,379
Greek						
British	2,150	1,173,382	2,304	1,284,574	2,433	1,400,290
Hawaiian			1	778		
Italian	28	13,544	25	14,081	30	16,484
Nicaragua			1	801		
Dutch	290	60,276	280	54,409	290	63,286
Norwegian	279	106,230	277	115,364	270	115,323
Austrian	7	3,921	3	1,543	8	4,558
Portuguese					1	321
Russian	8	2,740	7	2,857	13	4,243
Swedish	89	27,114	97	28,022	107	27,991
Spanish	9	4,024	39	21,960	47	26,001
Total	5,316	2,284,116	5,649	2,489,148	6,058	2,762,370

No. 2.—*Nationality of flags of the sea vessels arrived at the port of Hamburg.*

Flag.	1878.		1879.		1880.	
	Number of vessels.	Total tonnage.	Number of vessels.	Total tonnage.	Number of vessels.	Total tonnage.
Argentine			1	151		
American (U. S.)	26	21,396	18	17,910	15	18,476
Belgian	10	5,801	6	3,488	4	1,891
Chilian	1	808				
Costa Rica			1	1,486		
Danish	98	21,323	94	18,403	90	19,551
German	2,184	768,861	2,408	874,945	2,621	1,017,835
French	130	58,714	102	49,921	89	44,723
Greek						
British	2,153	1,179,459	2,311	1,287,244	2,431	1,403,304
Hawaiian			1	778		
Italian	26	12,619	25	13,783	32	17,040
Nicaragua			1	801		
Dutch	288	59,368	281	55,188	300	65,022
Norwegian	284	108,986	275	113,647	269	118,023
Austrian	7	3,921	3	1,543	9	5,091
Portuguese					1	321
Russian	3	1,640	7	2,857	10	3,476
Swedish	88	26,116	96	27,549	108	27,226
Spanish	10	4,330	41	23,151	45	24,821
Total	5,308	2,273,342	5,671	2,492,905	6,024	2,766,806

No. 3.—Sea vessels departed from Hamburg.

Departed for—	1878.		1879.		1880.	
	No. of vessels.	Registered tons.	No. of vessels.	Registered tons.	No. of vessels.	Registered tons.
German ports	954	91,420	1,093	97,300	1,136	102,862
Great Britain and Ireland	2,522	1,401,544	2,714	1,543,470	2,849	1,641,948
Other European countries	1,102	229,120	1,113	238,767	1,193	306,845
America	557	299,736	564	432,565	699	522,297
Africa	104	28,741	83	22,713	93	48,456
Asia and Australia	66	42,545	62	43,332	84	60,002
Total	5,316	2,284,116	5,649	2,489,148	6,056	2,782,370
Of which were:						
Vessels with cargo	3,929	1,655,835	3,975	1,766,439	4,506	2,098,546
Vessels in ballast	1,387	628,281	1,674	722,709	1,552	695,824
Sailing vessels	2,335	506,741	2,476	530,538	2,668	586,102
Steamships	2,981	1,777,375	3,173	1,958,610	3,390	2,176,268
Percentages:						
Sailing vessels	43.9	22.2	43.8	21.3	44.0	21.2
Steamships	56.1	77.8	56.2	78.7	57.0	78.8
	100	100	100	100	100	100

No. 4.—Sea vessels arrived at Hamburg.

Arrived from—	1878.		1879.		1880.	
	No. of vessels.	Registered tons.	No. of vessels.	Registered tons.	No. of vessels.	Registered tons.
German ports	1,152	107,174	1,231	106,826	1,295	135,492
Great Britain (colliers)	744	449,859	773	495,929	855	543,086
Great Britain (other vessels)	1,577	826,933	1,728	919,740	1,802	971,621
Other European countries	1,031	316,481	1,040	320,896	1,115	361,523
America	671	495,551	718	542,838	794	644,416
Africa	40	11,793	50	18,809	54	26,119
Asia and Australia	93	65,509	131	87,967	109	84,549
Total	5,308	2,273,342	5,671	2,492,905	6,024	2,766,806
Of which were:						
Vessels with cargo	4,454	2,124,346	4,900	2,827,379	5,115	2,564,936
Vessels in ballast	854	148,996	771	165,526	909	201,870
Sailing vessels	2,336	505,475	2,503	534,207	2,637	585,812
Steamships	2,972	1,767,867	3,168	1,958,698	3,387	2,180,984
Percentages:						
Sailing vessels	44.0	22.2	44.1	21.4	43.8	21.2
Steamships	56.0	77.8	55.9	78.6	56.2	78.8
	100	100	100	100	100	100
Average burden,						
Sailing vessels		216		213		222
Steamships		595		618		644

No. 5.—*Arrivals and departures of river vessels.*

	1878.		1879.		1880.	
	Arrived.	Departed.	Arrived.	Departed.	Arrived.	Departed.
Sailing vessels	3,684	3,781	3,959	3,972	3,855	3,805
Steamboats	2,156	2,142	2,126	2,132	2,412	2,402
Tug-boats	1,611	1,664	1,270	1,284	1,750	1,727
Wood-rafts	52	.....	30	.....	34	.....
Total	7,503	7,587	7,384	7,388	8,051	7,934
Of which were:						
Vessels with cargo	6,088	5,804	6,043	5,852	6,403	6,368
Empty vessels	1,415	1,783	1,342	1,536	1,648	1,566
Registered tonnage:						
Vessels with cargo	816,673	774,388	800,156	795,885	912,452	911,220
Empty vessels	143,367	192,160	162,116	173,371	213,269	204,309
Total	960,040	966,548	962,272	969,256	1,125,721	1,115,529

COMMERCE OF THE PORT OF GRAO, SPAIN.

REPORT BY COMMERCIAL AGENT LOEWENSTEIN.

The port Grao of Valencia, situated latitude 39° 28′ north, longitude 5° 52′ 50″ east of the meridian of St. Fernando, is formed on the shore and bay of the Gulf of Valencia, about four miles from the provincial capital Valencia, united with it by a branch of the Valencia Tarragona Railway, and moreover a tramway, whose wagons are running to and from Grao and Valencia every ten minutes during the day.

The town of the port (Villanueva del Grao), consisting formerly of only a few poor mud huts for fishermen, is to-day a large town with fine buildings and a busy population of about 12,000 inhabitants, which number is largely augmented in summer time by tourists.

This year the reform of this artificial port is nearly finished, being now one of the handsomest and surest ports of the Mediterranean Sea, consisting of the outer and inner ports of a surface of 630,100 square meters, with a depth of 28 feet in the outer and from 23 to 18 in the inner port.

Though of a sufficient capacity at present, the visible yearly increase of its maritime movement suggested the project of enlargement, triplicating the extension of same. During the whole year a great many vessels of almost all nations enter this port, but the greatest movement takes place from November to the middle of June, the export season of raisins, oranges, and many other fruits, during which epoch often from 60 to 80 vessels of all classes are found anchored in it, most of them English, of which this year alone 300 did enter.

Of the United States vessels only one made her appearance during the same time, viz, brig Sarah E. Kennedy, of 399.50 tons, arriving from New York with cargo of tobacco, value $30,200, and outward with cargo of wine, value $31,000, to Montevideo.

Almost the whole trade between the United States and this port is effected chiefly by English steamers, and Italian and Swedish small sailing vessels. This absence of United States vessels in this port might be filled by a line of American steamers between the ports of the United States and this, which would greatly favor the export of the products of the United States, particularly during the epoch of its greatest movement of export.

The line should be of steamers, for preference is always given to them over sailing vessels. In this port alone the entire cargo for a year carried by 142 sailing vessels corresponds almost exactly with the cargo (33,225 tons) entered during the month of March by *only* 23 steamers.

There is to be found plenty of fresh water, all classes of vegetables, meat, bread, &c., large store-houses of wine, oil, coal, guano, &c., all plentiful and at moderate prices. During this year there was established in the town an important refinery of petroleum (from the United States), also a large distillery for alcohol, rice-starch factory, iron foundry for the construction of machines, and various large store-houses to serve as depots for merchandise imported and, or to be, exported.

This province enjoys in general a mild and healthy climate, and is free from epidemic or sporadic diseases.

The crops were in general of good quality, regular quantity, and moderate market prices.

This year about 400,000 quintals of raisins were produced and sold at the price of $5 and $6 per quintal, the best quality; of these about 160,000 quintals were exported to America. I don't possess reliable statements of the raisins exported to the United States from the port of Denia (Province Alicante). The port Grao of Valencia dispatched to the United States alone for $15,044.03.

The crop of oranges presents itself this year also abundant and excellent quality; the value of this year's crop will probably exceed $3,000,000, of which for about $417,528.63 were exported direct from this port to the United States.

The wine, also one of the most important products of this district, in spite of the devastating philoxera, was plentiful and of excellent quality; the export of wine to the United States for this year, amounting to the sum of $64,998.35.

Another important article of export in Saffron, from the neighboring province, La Mancha, whose excellent quality is preferred in all markets, and sold at from 8 to 12 dollars the pound.

Spanish glazed tiles, mosaics, silk-worm guts, silken goods, cigar paper, fans, almonds, peanuts, capers, onions, garlics, and other miscellaneous articles are also exported.

The value of the products of this province, exported from this port direct to the United States during the year, amount to $525,678.73.

The value of the principal imports this year, direct from the United States, amount to $489,092, viz: Petroleum, $53,682; tobacco, $60,200; alcohol, $320,210; staves, $5,000; sewing and other machines, $50,000; showing an excess over the exports of $36,586.73.

The indirect importation from the United States, although important, is not known for want of reliable data, being imported chiefly from large depots in England (Liverpool and London) and Germany (Hamburg), and enter here as English and German goods. Among these are the American canned goods, salted and otherwise conserved meat and fat, dry and wet salted beef, sheep and pig casings, lard, hams, sponges, machines, &c.

No reliable official statistical data being published during the year, I had to guide myself by the data of this office, and those otherwise acquired.

RICHARD LOEWENSTEIN,
Commercial Agent.

UNITED STATES COMMERCIAL AGENCY,
Grao of Valencia, December 31, 1881.

SHIPPING AND TRADE OF HANKOW.

REPORT BY CONSUL SHEPARD.

The year embraced in this report has been one of prosperity and peace in this consular jurisdiction, but with some features worthy of notice. When the disturbed relations between China and Russia threatened war, this region was the principal point at which soldiers were recruited, and Hankow was the central depot for their gathering. About 30,000 troops were recruited here and taken north to Shanghai by ocean steamers of the China Mail Steam Navigation Company's lines, arriving here for that special purpose. These soldiers were mostly coolies, and the reduction of the laboring classes so largely, with the higher pay promised them, had the effect, for a time, of increasing the rate of wages, and interfered with all trade, as the coolies in China are literally "the beasts of burden," all movement of merchandise being effected by bearing it upon the human shoulders. But the dearth of help was only temporary, and in a few weeks others flocked in to do the work, and the absence of the old hands was not longer noticed, and matters fell into their old routine. Towards the close of the year, treaties having been concluded, the soldiers who survived were returned by the same steamers to their homes. This accounts for the unusual number of ocean steamers, and the spasmodic increase of tonnage observable in the table of shipping which follows:

TABLE 1.—*Statement showing the navigation at the port of Hankow for the year ending December* 31, 1881.

Flag.	Entered.						Cleared.					
	Steamers.		Sailing vessels.		Total.		Steamers.		Sailing vessels.		Total.	
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
United States			54	8,143	54	8,143			51	7,549	51	7,549
British	273	244,198	39	7,677	312	251,875	271	241,839	38	7,377	309	249,216
Chinese	183	182,461	34	2,662	217	185,183	183	182,461	93	8,627	276	191,088
German	2	2,285	9	1,402	11	3,687	2	2,285	10	1,552	12	3,837
Russian	2	4,315			2	4,315	2	4,315			2	4,315
Danish			1	131	1	131			2	262	2	262
Spanish			23	3,914	23	3,914			23	3,890	23	3,890

Of the steamers entered, 392 were from Shanghai, 17 from Schang, 22 from Shanghaikwan, 20 from Kiu-Kiang, 6 from Hong-Kong, 1 each from Canton, Chin Kiang, and Nagasaki.

Of sailing-vessels entered, 94 were from Shanghai, 31 from Ningpo, 34 from Schang, 1 newly built at Hankow.

Of the steamers cleared, 408 were from Shanghai, 19 from Schang, 11 from London, 9 from Chin Kiang, 6 from Kiu-Kiang, 4 from Odessa, 1 from Wuhu.

Of sailing-vessels cleared, 92 were from Shanghai, 90 from Chin Kiang, 34 from Ningpo, 1 from Kiu-Kiang.

The foregoing table does not include the class of native vessels known as "junks," since they have been relegated to the native customs, and

no access can be had to the records, if any are kept. Quite an extensive business is done at the port in these vessels. Two American hongs alone have chartered 89 of this craft for Chin Kiang, and one shipper has in like manner dispatched 25 from Schang to Hankow. They are not measured, and therefore the tonnage cannot be given, but each junk pays a fee of two dollars for a consular clearance, and another of one dollar for a letter to the customs.

During the early part of the year the United States consul was engaged in a controversy with the native authorities regarding this business. In consequence of irregularities practiced by certain shippers, all British subjects, Her Britannic Majesty's consul took restrictive steps, on the ground that no charter was ever actually made by foreigners. His premise was that they acted only as go-betweens for the Chinese, to obtain the necessary papers and facilities from the respective consuls taking the craft out from under native jurisdiction, bringing the vessels under treaty control, for the special purpose of enabling the native owner to avoid payment of native charges.

For this service the foreign parties were alleged to be in receipt of stipulated pay, either by salary or otherwise. All this was without question, true of the British citizens referred to, as their consul obtained possession of contracts proving it.

The result was that similar charges were made by the Taotai against Americans. At the same time an old proclamation was put in force, placing all such vessels entirely under native control, and forbidding their clearance by the foreign customs, as under foreign jurisdiction. As usual in similar cases the authorities brought exactions to bear on the native owner of the junk, forbidding, under heavy penalty, any charter to a foreigner until the owner entered into a penal bond to pay all port dues, Likin duties, or other claims that might be exacted in the whole course of the voyage. They were at the same time forbidden to allow a foreigner to pay such exactions, in any form, or to give any guarantee, directly or indirectly, to save the owner from the pecuniary loss necessarily to follow. This involves most invidious consequences; for, as the junks would have no foreign papers, they would have no protection against illegal exactions. What would be called port dues could be imposed without limit at every Likin station on the entire route, more than twenty in number; the cargoes could be overhauled by every petty official at the barriers, and duties *de marchandise* could be laid as malevolence or cupidity prompted, and there would be no redress except through native sources, and that would be impossible to obtain. This was, of course, a total suppression of the business, and probably so intended, as no owner dared to charter a junk at any price, for he could not tell what pecuniary consequences he would be liable to.

At this juncture the Taotai visited me, and laid before me the charges suggested against the American charterers. At his request I made a thorough examination of every point, and of the business methods of the parties. I could find no irregularities, but on the contrary all the evidence proved that the business was instituted upon honor years ago, was conducted in good faith and honesty, and with all observance of treaty provisions. In all cases, without exception, on application for consular privileges I had rejected a declaration of actual charter, with the filing of a duly executed charter-party. This was the ground upon which I asked for custom-house facilities; and I at once reported to the Taotai the result of my examinations of the charge preferred, or more accurately the suspicions that had been started, at the same time proposing to him a joint examination of any specific case he might select,

requesting him to bring forward, to substantiate any charge, whatever evidence he might have, or could discover, which I could not control. This he declined to do, and tacitly abandoned the matter. It is due to him to say I did not then think, nor do I now believe, that he moved in the business of his own motion, or from any hostility; and in all subsequent affairs he has treated the parties as if no suspicion had ever existed, granting them all proper facilities.

I regarded the summary exclusion of this business from the foreign customs as an unjust discrimination against a legitimate trade, and as a concealed step to crowd out foreign enterprise. The aggression was so marked, being a total departure from the rules of more than sixteen years, that I felt it my duty to present the whole subject to the American minister at Peking. Elaborate correspondence ensued, with copies of all papers bearing on the topic, and Mr. Angell promptly entered into the affair, and used all his influence to have the proclamation I have referred to rescinded and the old orders re-established. This he was unable to effect; but he did secure an order from the Tsung-li Yamen, or board of foreign affairs, which forestalled and prevented most of the evils that would otherwise have been established. It stayed the collection of port dues anywhere except at the port of Kiu-Kiang, and totally forbade any interference with cargoes, or the paying of Likin, or other duties on the merchandise in transit. But it insisted that the junks must pay port dues to the native customs, instead of tonnage dues at the foreign customs. The final effect was to allow the business, with this exception, to go on as before; and after four or five months of paralysis it has now assumed its former proportions. I still think the craft in question should be placed on the same footing as larger vessels, even by the plain language of the treaties.

IMPORTS AT THE PORT.

In the subjoined table I present a list of the important imports, with quantities and values reduced to United States measurement and currency. I cannot give the "amount of duties," for the sufficient reason that nearly the whole importation is entered at Shanghai, and the duties are paid there, the revenue of Hankow being mainly derived from tariff on exports and from tonnage dues. The reduction from Haikwan taels, in which all customs charges are made and collected, to United States currency, is based upon the value of that tael as compared with the Hankow tael. The equivalent of one Haikwan tael is 1.0888 Hankow taels, which, at 72, the average rate, is $1.526+. This leads me to remark that in the October number, No. 12, of Commercial Relations, at page 49, an error has been inadvertently made of substituting, apparently, the Hankow tael for the Haikwan tael as the basis of value of cotton goods import of 1880. The true value would give $35,682,392 as the cotton goods import into China for that year, instead of the sum therein stated, an increase of nearly three and a half millions of dollars. In the connection in which the estimate appears this sum is not unimportant, and I trust the circumstance will justify me in thus having suggested the correction. The error is a very natural one, from the similarity of names, but the Haikwan tael is always of about $1.50 value.

NOTE BY THE DEPARTMENT.—In the volume compiled by the imperial maritime customs of China, giving returns of the trade of the treaty ports for the year 1880, the following very explicit statement is printed on page 5:

"The *Haikwan* tael, *in which the customs revenue and all values are stated*, is equiva-

lent to $1.38 in American gold, to 5*s* 9½*d* in English money, and to francs 7.24 in French money."

It will therefore be seen that the consul, in estimating the Haikwan tael as "being always of about $1.50 value," estimates it at 12 cents more than the Chinese imperial customs authorities. In reducing all foreign values to American equivalents the Department of State takes the equivalent given by the Treasury estimate for the year under consideration, up to the smallest fraction, for in large amounts fractions count heavily in the aggregate. In the absence of Treasury estimates of foreign money, as in the case of China, the official valuations of the country under consideration are given, and the reference always given, as is the case at page 49, in the cotton report, where it is plainly stated that "the *Haikwan tael*, in which the foregoing values are given, is quoted by the Chinese customs at $1.38."

This explanation is given with the view of directing the attention of the consuls in general to the necessity of giving the official valuations of foreign moneys in reducing them to American money. In many cases the £ sterling is lumped at $5, instead of giving it its true value, $4.86; the franc is reckoned at 20 cents, instead of 19.3 cents; and the Haikwan tael, which receives a new valuation at the Chinese customs almost every year, at anything from $1.45 to $1.50. This, although more convenient, is very misleading when large amounts are at issue, as witness the valuation set by the consul upon the imports of cotton goods into China and their value according to Chinese official returns.

TABLE 2.—*Statement showing the imports of Hankow, China, for the year ending December 31, 1881.*

Articles.	Quantity.	Value entered.	Duties.	Countries whence.
American sheetings.....pieces..	469,00	$168,349 85	Regarding deficit in this column, note remarks above given.	United States.
American gray shirtings.....do....	1,510	5,022 07		Do.
American duck.....do....	4,360	10,895 64		Do.
American drills.....do....	53,088	178,685 44		Do.
American twills.....do....	3,825	11,661 69		Do.
American ginseng clar.....pounds..	55,867	278,845 98		Do.
American quicksilver.....do....	213,000	122,449 29		Do.
American kerosene.....gallons..	260,400	51,232 40		Do.
Gray shirtings.....pieces..	1,726,437	4,136,366 44		Great Britain.
White shirtings.....do....	471,459	1,473,536 12		Do.
Dyed shirtings.....do....	16,990	54,755 93		Do.
F. Cloths.....do....	458,918	877,210 42		Do.
Drills.....do....	194,995	520,647 09		Do.
Drills, Dutch.....do....	220	1,789 84		Great Britain and Germany.
Twills and jeans.....do....	19,120	46,042 47		Holland.
Chintzes.....do....	89,028	181,946 30		Great Britain.
Turkey reds.....do....	24,955	82,973 20		Do.
Muslins and cambrics.....do....	29,016	60,176 28		Do.
Brocades.....do....	11,196	25,371 28		Do.
Damasks.....do....	7,353	55,950 79		Do.
Velvets and velveteens.....do....	28,697	403 060 17		Do.
Handkerchiefs.....dozen..	87,810	72,245 42		England and Germany.
Wools, lustres and Orleans.....pieces..	66,927	348,265 25		Great Britain.
Camlets.....do....	87,301	1,639,653 43		England and Dutch.
Cloths, medium, &c.....do....	24,088	1,118,882 13		Great Britain.
Lastings.....do....	46,536	750,360 14		Do.
Long ells.....do....	59,360	567,488 88		Do.
Spanish stripes.....do....	14,991	394,599 81		Do.
Metals:				
Iron rail rods.....pounds..	6,444,533	147,513 84		Do.
Iron wire.....do....	1,296,666	66,605 32		Do.
Window glass.....boxes..	10,889	66,466 46		Do.
Lead.....pounds..	6,619,330	393,230 46		Do.
Tin.....do....	211,866	48,575 51		England and Straits.
Tin in plates.....do....	277,260	17,955 44		Great Britain.
Opium:				
Malwa.....do....	428,533	2,492,084 42		Malwa. } India.
Patna.....do....	107,600	1,311,775 54		Patna. } India.
Persian.....do....	6,607	11,597 60		Persia. } India.
Miscellaneous:				
Cotton, raw.....do....	24,248,000	3,567,426 90		Native ports.
Cotton yarn.....do....	893,467	980,122 94		Great Britain.
Sugar, brown.....do....	22,620,533	1,119,917 67		Native ports.
Sugar, white.....do....	15,201,466	892,304 08		Do.
Silk piece goods.....do....	210,733	1,197,679 33		Do.
Matches.....gross..	376,958	208,848 36		Japan and England.

The foregoing are the chiefest articles, with their entered values, and for the convenience of reference I have placed the imports from the United States at the head of the table. These aggregate the sum of $827,142.36.

The total value of the foreign imports for the year was Haikwan taels 16,173,593, equal to $24,680,903.

The total value of the imports of native produce was Haikwan taels 9,073,075, equivalent to $13,845,512.

The total value of foreign and native imports combined is $38,526,415.

EXPORTS FROM THE PORT.

To give a definite idea of the principal exports and their entered value, I present the following:

TABLE 3.—*Statement showing the exports from Hankow, China, for the year ending December* 31, 1881.

Articles.	Quantity.	Value.	Countries whither.
Dye-stuffs ..... pounds..	1,332,000	$40,699 95	Native ports.
Fungus ..... do....	2,404,507	732,170 22	Do.
Gypsum ..... do....	15,572,533	43,735 04	Do.
Hemp ..... do....	29,924,335	840,146 81	Do.
Hides, cow ..... do....	3,502,133	470,632 13	United States and Great Britain.
Scales, dried ..... do....	1,366,013	76,201 86	Native ports.
Medicines ..... do....	14,873,656	1,289,717 73	Do.
Musk ..... do....	2,100	250,068 67	United States and Great Britain.
Nankeens ..... do	527,733	244,886 38	Native ports.
Nut galls ..... do....	3,019,200	333,054 08	Foreign and native.
Oil wood ..... do....	35,905,066	2,685,811 88	Native ports.
Opium, Szechuen ..... do....	480,647	1,416,243 98	Do.
Paper ..... do	1,614,400	11,943 83	Do.
Rhubarb ..... do....	730,933	152,082 69	S. S., Japan, and Great Britain.
Safflower ..... do....	487,345	317,726 93	Native ports.
Silk, Szechuen ..... do....	763,866	1,886,705 20	Shanghai for export.
Steel ..... do	411,866	24,142 85	Native ports.
Tallow, vegetable ..... do....	13,752,133	1,137,280 37	Do.
Tea:			
Black ..... do....	80,208,933	14,596,801 93	England and United States.
Brick black ..... do	19,145,733	1,229,729 50	Russia.
Brick green ..... do....	6,393,200	373,859 32	Do.
Tobacco ..... do....	14,547,066	1,757,492 67	Native ports and Great Britain.
Varnish ..... do....	1,021,866	415,500 81	Native ports.
White wax ..... do....	1,692,409	1,085,039 41	Do.

The total amount of exports for the year was Haikwan taels 19,833,413, equal to $30,265,788. This sum, added to the total value of imports previously given, shows the value of the trade of the port for the year to be Haikwan taels 45,080,081, equivalent to $68,792,203.

The amount of duties collected on both imports and exports, with other receipts for tonnage dues and like business, was Haikwan taels 2,047,218, which, reduced to United States currency, is $3,124,055.

It is pertinent to say that the great bulk of these exports, tea excepted, are not exports at all in the sense of being sent out of the empire. They are shipped from this port through the customs, but very largely are transported to other native ports for distribution and consumption by the people themselves. This is true even of the great bulk of merchandise sent to Hong-Kong, a strictly foreign port, as it is distributed from thence to all the southern provinces, still, the statement exhibits the business of Hankow, and the importance of the port as a receiving and distributing center.

TRADE BETWEEN HANKOW AND THE UNITED STATES.

The market for goods from the United States is still gradually increasing. An exhibit of its actual state will be found in the following table:

TABLE 4.—*Statement showing the imports and exports between Hankow and the United States for the year ending December* 31, 1881.

Articles.	Imports.		Exports.	
	Quantity.	Value.	Quantity.	Value.
Sheetings ..... pieces..	46,900	$168,349 85	.....	.....
Gray shirtings ..... do....	1,500	5,022 07	.....	.....
Duck ..... do....	4,360	10,895 64	.....	.....
Drills ..... do ..	53,088	178,685 44	.....	.....
Trills ..... do....	3,825	11,661 69	.....	.....
Ginseng, clarified ..... pounds..	55,867	278,845 98	.....	.....
Quicksilver ..... do ..	213,600	122,449 29	.....	.....
Kerosene ..... gallons .	260,400	51,232 40	.....	.....
Tea (direct shipments) ..... pounds .	.....	.....	18,755,866	$54,669 30
Hides (indirect shipments) ..... not ascertainable..	.....	.....	.....	.....
Musk (indirect shipments)	.....	.....	.....	.....
Rhubarb (indirect shipments)	.....	.....	.....	.....

The only shipments direct from Hankow to the United States are in the single article of tea. The amount given above is only that shipped in invoices certified at the consulate, but it is well known that much larger amounts are sent down the river to Shanghai by river steamers, and from thence invoiced to America, mostly by British lines of steamers, by way of London. The agents give through-bills of lading, and the freight rates have been very much lower than by the Pacific mail route. These remarks are true also of hides, musk, and rhubarb. Of hides, Table No. 3 of exports shows 3,502,133 pounds exported, and my investigations show that nearly all, certainly more than one-half the quantity, is ultimately shipped to the United States. At least a moiety of the musk and rhubarb probably takes the same direction. If this be true, then the value of exports from Hankow to the United States would be increased by the sum of $436,391.75.

NEW ENTERPRISES POSSIBLE.

As items of some interest in suggesting new and direct business with the United States at this port, it is worth mentioning that the viceroy of the province of Szechuen, more than a thousand miles inland from Shanghai, has recommended to the guilds of the capital city to procure better fire-extinguishing apparatus, the need of which has been demonstrated by a large conflagration. An American firm is now negotiating with them with a view of introducing American fire-engines. If successful it will be an important event as an opening for the introduction of other machinery of American ingenuity. Coeval with this indication is another investigation looking to a new article of export. An American oil manufacturing company has conceived the idea of utilizing vegetable tallow, and the consul has gladly given them all the information possible to obtain as to production, first cost, duties, expenses of export, and kindred matters. The article is produced in large quantities in this vicinity, which is the center of its cultivation, and can be increased to any desired extent. It is now used solely to manu-

facture native candles, but by chemical agencies may become an important article for similar uses among civilized people. I cannot learn that it has ever been exported for any purpose.

ISAAC F. SHEPARD,
United States Consul.

UNITED STATES CONSULATE,
Hankow, China.

SALT, SUGAR, AND TOBACCO IN GERMANY—PRODUCTION AND CONSUMPTION PER CAPITA IN THE GERMAN EMPIRE.

REPORT BY CONSUL CATLIN, OF STUTTGART.

The incorporation of the kingdom of Wurtemberg into the German Imperial Zolverein has rendered it practically impossible to obtain any full or accurate customs statistics pertaining to Wurtemberg alone. All the figures are merged into one grand total, and that total shows the aggregate of duties collected or paid in the entire German Empire. Some statistics of great interest and value have, however, just been published in this connection showing the annual consumption per capita throughout the German Empire of many of the principal dutiable articles. They form a basis upon which American producers, manufacturers, and exporters may estimate the probable demand which will exist on the German market in any given year for any one of the articles named.

Salt, sugar, and tobacco, the three chief taxable articles of general consumption, contributed during the year 1881–'82 the enormous sum of 90,499,730 marks, or about twenty-two and a half millions of dollars, to the German treasury, nearly one-half as much (188,250,000 marks) as was collected by the custom-house for duties on all imports from other lands. The following table shows the amount of taxes collected on these articles for the last ten years:

Years.	Salt.	Sugar.	Tobacco	Total in—
	Marks.	*Marks.*	*Marks.*	*Marks.*
1872	24, 532, 669	8, 666, 685	1, 311, 813	34, 511, 167
1873	33, 083, 909	45, 453, 451	1, 124, 973	79, 662, 333
1874	33, 751, 714	50, 064, 208	1, 182, 260	84, 998, 182
1875	33, 247, 039	40, 241, 731	810, 185	74, 298, 955
January 1, 1876, to March 31, 1877	43, 147, 722	50, 525, 423	1, 137, 285	94, 810, 430
April 1, 1877, to March 31, 1878	34, 986, 573	45, 184, 779	865, 437	81, 036, 789
1878–'79	35, 401, 337	40, 995, 173	783, 866	77, 180, 376
1879–'80	34, 552, 780	51, 422, 850	899, 590	86, 875, 220
1880–'81	35, 740, 790	46, 780, 700	369, 000	82, 890, 490
1881–'82	36, 368, 730	49, 553, 000	4, 578, 000	90, 499, 730
Total	344, 813, 263	428, 888, 000	13, 062, 409	786, 763, 672

Amount consumed per capita.

Years.	Salt.	Sugar.	Tobacco.
	Kilos.	*Kilos.*	*Kilos.*
1871–'72	.....	5.7	2.15
1872–'73	12.0	6.6	2.62
1873–'74	12.4	7.0	1.64
1874–'75	12.7	6.5	1.59
1875–'76	12.6	7.6	1.59
1876–'77	12.3	5.6	1.61
1877–'78	12.8	6.6	2.30
1878–'79	12.4	6.7	2.84
1879–'80	13.2	6.5	0.75

Amount of tax collected per capita in the German Empire on salt, sugar, and tobacco.

Salt.		Sugar.		Tobacco.	
Years.	Per capita.	Years.	Per capita.	Years.	Per capita.
	Marks.		*Marks.*		*Marks.*
1868	0.94	1868	0.98		
1869	0.98	1869	0.90	1869–'70	0.23
1870	1.02	1870	0.92	1870–'71	0.25
1871–'72	1.09	1871	0.98	1871–'72	0.34
1872–'73	1.83	1872	0.91	1872–'73	0.51
1873–'74	1.46	1873	0.94	1873–'74	0.27
1874–'75	1.18	1874	0.95	1874–'75	0.30
1875–'76	1.49	1875	0.93	1875–'76	0.32
1876–'77	1.13	1876	0.93	1876–'77	0.33
1877–'78	1.15	1877–'78	0.93	1877–'78	0.47
1878–'79	1.15	1878–'79	0.92	1878–'79	0.60
		1879–'80	0.91	1879–'80	0.21

The growth of German salt production is shown by the following table. Quantity produced in tons (1,000 kilos.).

Years.	No. of salt mines.	No. of salt works.	No. of Factories.	Crystal salt.	Other rock salt.	By boiling.	Coarse salt.	Total.
1872	8	65	11	2,819	112,665	381,975	8,011	505,470
1873	8	65	11	3,757	121,348	378,455	7,905	511,465
1874	7	63	9	3,608	122,277	410,590	8,239	544,714
1875	8	63	9	3,707	147,452	402,440	7,171	560,770
1876	9	64	8	4,291	146,936	401,773	9,682	562,682
1877–'78	8	62	7	30,839	130,211	415,894	12,794	589,738
1878–'79	9	61	8	57,530	130,329	410,277	8,884	607,020
1879–'80	9	60	10	55,907	168,761	434,203	9,013	667,884

SUGAR.

The enormous increase of sugar production in Germany during the last decade by the development of the beet-root industry is illustrated by the following figures:

Years.	Number of factories.	Beets consumed.	Number of kilos of beets required to one kilo of sugar.	Every one hundred kilos of beet yielded:		Number of tons produced.	
				Sugar.	Molasses.	Sugar.	Molasses.
		Tons.		*Kilos.*	*Kilos.*		
1871–'72	311	2,250,918	12.10	8.28	2.84	186,442	63,892
1872–'73	324	3,181,551	12.10	8.26	2.88	262,551	91,589
1873–'74	337	3,528,764	12.70	8.26	3.00	291,041	105,818
1874–'75	333	2,756,745	10.70	9.30	3.54	256,412	97,603
1875–'76	332	4,161,284	11.60	8.60	3.22	358,048	133,952
1876–'77	328	3,550,037	12.27	8.15	3.13	289,423	111,101
1877–'78	329	4,090,969	10.82	9.24	3.00	378,009	122,812
1878–'79	324	4,628,748	10.86	9.21	2.89	426,155	133,651

TOBACCO.

Statistics show a decrease in the product of tobacco and in the number of persons planting it, but a compensating increase in the selling price of the article produced:

Years.	Number of tobacco planters.	Number of pieces of ground planted with tobacco.	Product of—		Average value per ton.	Percentage of foreign and domestic tobacco used.	
			Tobacco.	Leaf to the hectare.		Foreign.	Domestic.
July 1 to June 30—			*Tons.*	*Tons.*	*M'rks.*		
1871–'72	178,591	22,673	35,895	1.59	510	67	33
1872–'73	200,829	26,491	45,132	1.71	696	73	27
1873–'74	214,267	30,501	54,070	1.77	440	50	50
1874–'75	183,555	22,456	42,133	1.87	490	65	35
1875–'76	191,896	24,294	37,966	1.56	430	70	30
1876–'77	174,501	21,735	31,702	1.46	412	74	26
1877–'78	165,273	17,915	29,863	1.67	483	80	20
1878–'79	157,175	18,016	29,889	1.66	492	84	16
1879–'80	159,061	17,273	28,409	1.64	754	72	28

GENERAL STATISTICS.

The following table is also of great interest as showing the annual consumption, *per capita*, from 1859 to 1879, of prominent articles of trade, as therein enumerated, viz:

Years.	Raw coffee.	Tea.	Fresh Southern fruits.	Almonds, currants, raisins, dates and figs.	Petroleum.	Hard coal.	Soft coal.	Cotton.	Cotton yarn.	Pig-iron.
	Kilos.	*Kilos.*	*Kilos.*	*Kilos.*	*Kilos.*	*Kilos.*	*Kilos.*	*Kilos.*	*Kilos.*	*Kilos.*
1859	1.75	0.01	0.07	0.22	.....	.....	.....	1.42	1.83	.....
1860	1.81	0.02	0.08	0.24	.....	.....	.....	1.96	1.83	18.6
1861	1.98	0.02	0.08	0.25	.....	.....	.....	2.13	2.29	20.8
1862	1.78	0.02	0.09	0.26	.....	.....	.....	1.09	1.09	24.0
1863	1.75	0.02	0.10	0.29	.....	.....	.....	1.13	1.09	27.9
1864	1.84	0.02	0.09	0.30	.....	.....	.....	1.02	1.09	28.0
1865	1.97	0.02	0.10	0.30	.....	.....	.....	1.29	1.09	30.8
1866	1.99	0.02	0.10	0.29	0.90	.....	.....	1.58	1.75	32.2
1867	2.10	0.02	0.10	0.28	1.65	.....	.....	1.82	1.75	32.8
1868	2.23	0.02	0.10	0.30	1.90	.....	.....	1.91	1.75	34.2
1869	2.15	0.02	0.10	0.36	2.36	.....	.....	1.66	1.75	38.8
1870	2.50	0.02	0.10	0.29	2.47	.....	.....	2.08	1.75	38.8
1871	2.18	0.02	0.11	0.37	3.19	.....	.....	2.87	2.67	48.4
1872	2.26	0.02	0.14	0.39	2.95	776	245	2.71	2.67	61.1
1873	2.37	0.02	0.15	0.46	4.16	818	272	2.85	2.67	68.5
1874	2.15	0.03	0.15	0.45	3.71	803	305	3.04	2.67	53.5
1875	2.38	0.03	0.17	0.46	4.76	825	303	2.71	2.67	54.9
1876	2.49	0.03	0.17	0.48	4.97	827	317	3.16	2.47	49.8
1877	2.21	0.03	0.20	0.40	5.78	799	304	2.70	2.47	48.5
1878	2.27	0.03	0.17	0.43	5.72	815	309	2.51	2.47	50.3
1879	2.51	0.05	0.18	0.43	5.68	855	322	2.78	2.50	48.9

GEORGE A. CATLIN,
Consul.

UNITED STATES CONSULATE,
Stuttgart, March 2, 1882.

SHIPPING AT THE PORT OF GHENT.

REPORT BY CONSUL WILSON.

I have the honor to report to the Department the shipping movement of the port of Ghent during the past year, 1881, as exhibited by the books of the captain of the port, a copy of which he has furnished me.

It shows the number of vessels arriving and departing during 1881, and, for the purposes of comparison, also during 1880. The same with the flag under which they sailed, and the different merchandise they carried; all stated in number of vessels and tonnage carried.

THOMAS WILSON,
Consul.

UNITED STATES CONSULATE,
Ghent, March 27, 1882.

General report of the captain of the port of Ghent, showing the arrival and departure of vessels, their flag, merchandise carried, and tonnage, for the year A. D. 1881.

1.—ARRIVALS DURING 1880 AND 1881.

Years.	Sail.	Tons.	Steam.	Tons.	Total vessels.	Total tons.	Average tons.
1880	273	53,296	380	157,814	653	211,010	323
1881	232	47,474	419	189,814	651	237,288	366

2.—UNDER WHAT FLAG.

Flag.	Vessels.	Tons.
German	98	23,427
English	435	186,693
Danish	13	1,866
Spanish	3	1,099
French	3	451
Holland	18	1,900
Italian	1	337
Norwegian	30	8,259
Russian	31	8,663
Swedish	19	4,593

3.—CARGOES.

Articles.	Imports.		Exports.	
	Vessels.	Tons.	Vessels.	Tons.
Merchandise assorted	380	174,334	379	174,755
Wood	122	29,991	.....	.....
Flax	50	9,115	.....	.....
Railroad ties	23	5,292	.....	.....
Railroad ties (assorted)	.....	.....	2	670
Cast iron	3	1,566	.....	.....
Wrought iron	.....	.....	1	32

3.—CARGOES—Continued.

Articles.	Imports.		Exports.	
	Vessels.	Tons.	Vessels.	Tons.
Flaxseed, whole	4	1,878		
Flaxseed, ground	2	799		
Creosote	11	1,689		
Oats	16	1,527		
Cotton	4	1,268		
Wheat	10	379		
Sugar	2	660		
Oil-cake, colzahemp	7	520		
Slate	2	195	1	98
Porcelain clay	2	173		
Tow (of flax)	1	172		
Figs	2	171		
Phosphates	1	133		
Minerals	1	131		
Barley	1	96		
Wine	1	92		
Salt	1	87		
Molasses	1	71	1	71
Starch	1	63		
Tile			11	2,216
Chicory			7	1,863
Macadam			9	826
Apples and other fruits			3	706
Beet sugar			1	367
Lime			1	364
Hay			1	289
Window-glass			2	269
Cement			1	69
Cement brick			1	92
Beans	3	517		
Stock fish and fish-oil	5	378		
Bran			11	1,421
Ballast	10	4,176	216	52,620
Totals	651	237,288	648	236,635

During the year there arrived from Holland and the river Schèldt 596 bateaus, or small boats, drawing 52,462 tons (of which 15 drawing 9,682 tons were driven by steam and the rest by sail and hand) These were laden with country produce and were generally domestic or market boats. They are not included in the foregoing tables.

The difference in the importation of wood (for construction) and railroad ties between 1881 and 1880, in favor of the earlier year, is shown to be 40 vessels, drawing 8,315 tons. This is attributed to two causes. (1) the export duty on wood in France, and (2) the increase (by one-third) on freights from Russia and Sweden.

THE COTTON MANUFACTURES OF CANADA.

REPORT BY CONSUL CRAWFORD, OF COATICOOK.

In my communication of March 29, upon the "Cotton Industry of Canada," I spoke only in general terms of the development of the manufacture of cotton goods.*

In connection with that report, it may be of some benefit to those in the United States interested in cotton and cotton goods to have more particulars in regard to this industry, and I will in this give some data.

The first cotton-mill in Canada was erected in 1847, at Sherbrook,

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with 2,000 spindles. This mill ran about one year, was then burnt down, and has never been rebuilt.

In 1851, a mill was built in Montreal, by an American. It was a small mill, with only 3,000 spindles. This mill is still in operation. A mill was erected at Dundas, Ontario, somewhere about 1858, with some 3,000 or 4,000 spindles. This was a yarn-mill. It has been enlarged, and is now in operation, with 20,000 spindles, and manufacturing colored cottons.

In 1864, the Lybster mill, at Thorold, on the Welland Canal, commenced with 9,000 spindles, and has now 15,000. This mill manufactures brown sheetings and ticks.

In 1867, a yarn-mill, with 5,000 spindles, was built in New Brunswick, and has increased its capacity to 15,000 spindles.

In 1871 or 1872, the Hudson mill, at Hochelaga (Isle of Montreal), commenced operations with 13,000 spindles, and is now running with 63,000.

In 1870, the Canada Cotton Company built the Cornwall mill, with 15,000 spindles; it has at this date, 30,000. This mill manufactures colored ducks, ticks, and checks.

In 1874, the Montreal Cotton Company started the mill at Valley Field with 25,000 spindles, and has increased the number to 40,000. This mill manufactures bleached cottons, and is the mill referred to in my communication of 29th ultimo as earning 82 per cent. profit last year. It will not be understood that in estimating the net earnings of this mill the wear of machinery was taken into account.

In 1878, the Coaticook Cotton Company commenced operations at Coaticook, with 12,000 spindles, for the manufacture of brown sheetings, said to be the best cloth produced in the Dominion. The success of this mill may be judged from the fact that some of the stock brought 50 per cent. premium last week.

I would also state that the whole increase in the capacity of these mills has been since the adoption of the National Policy.

This report does not, I presume, embrace all the cotton-mills now in operation in the Dominion, but it is sufficient to show that this industry is being rapidly developed, and when the additions to, and enlargements now being made of, existing mills are finished, and the new mills already commenced completed, Canada may well feel proud of the success of at least one branch of her home manufacture.

The same complaint is made here that is made in England, of the sanding of the cotton coming from the United States. I am informed that in some instances it has amounted to nearly 20 per cent. I intend to investigate the matter further, and report the result to the Department in some future communication.

J. G. CRAWFORD,
Consul.

UNITED STATES CONSULATE,
Coaticook, April 14, 1882.

NEW COINAGE LAW OF THE ARGENTINE REPUBLIC.

REPORT BY CONSUL BAKER, OF BUENOS AYRES.

At the late session of the Argentine Congress a law was passed (November 5, 1881) in regard to the monetary unit of the Argentine Re-

public, which not only considerably modifies the relative values of foreign coins in circulation here, but changes the actual value of the Argentine "peso," or gold dollar. Under the law of September 29, 1875, the "peso" or monetary unit of the country was equal to 100 Argentine cents. The new law makes the "peso" .033 cent less in value; *i. e.*, the Argentine monetary unit by the terms of the law of November 5, 1881, is only equal to 99.7 Argentine cents of the monetary unit under the old law. The present law went into operation on the 1st of February, 1882, and, as no coinage under the new law is yet in circulation, the present circulating medium of the country being bank notes based on the value of the monetary unit under the old law, the change must for a time create some confusion in the keeping of accounts, and where large payments are to be made also some inconvenience. As the subject is one of some interest to the United States, I translate below the most important provisions of the new law:

ARTICLE 1. The monetary unit of the Argentine Republic shall be the gold or silver dollar (*peso de oro ó plata*). The gold dollar shall be of the weight of 1.6129 gramos (equal to 25.1 grains, English weight), of the fineness of 900 parts of gold to 100 of alloy. The silver dollar shall be of the weight of 25 gramos of silver, of the fineness of 900 parts of silver to 100 of alloy.

ART. 2. The national mint shall coin money of gold, silver, and copper of the following denominations, kinds, values, finenesses, and weights, to wit:

Name.	Kind.	Value.	Standard of fineness.	Weight.	Diameter.
				Grams.	*Millimeters.*
The Argentino	Gold	5 dollars	900 and 100 M	8.0645	22
The half Argentino	do	2½ dollars	910 of copper	4.0322	19
The peso	Silver	100 cents	900 and 100 M. copper,	25.000	37
The half of a peso	do	50 cents	do	12.500	30
The fifth of a peso	do	20 cents	do	5.000	23
The tenth of a peso	do	10 cents	do	2.500	18
The twentieth of a peso	do	5 cents	do	1.500	16
	Copper	2 cents	95 parts of copper	10.000	30
	do	1	4 of tin, 1 of zinc	5.250	25

ART. 3. All these moneys must bear on the obverse the shield or coat of arms of the nation, with the inscription, "Republica Argentina," and the year of its coinage; on the reverse a bust wearing a "Liberty cap" with the inscription "Libertad," and the value, denomination, and "ley" of the piece. The "Argentino" and silver dollar (*peso plata*) shall bear the inscription "Igualidad ante la ley" on the rim. The other gold and silver pieces shall bear the rim grooved; the copper coins, plain or smooth.

ART. 4. The coinage of gold coins shall be limited. The coinage of silver shall not exceed four dollars for each inhabitant of the republic; and that of copper, 20 cents, the Executive having the power of determining the proportions between the multiples and submultiples of the coins of each metal.

ART. 5. All moneys of gold and silver, coined in accordance with this law, shall be legal tender throughout the republic in the payment of contracts and the canceling of obligations, &c.

ART. 6. In the payment of debts, the receipt of silver coins of less value than $1 and those of copper is not obligatory, except in the proportion of 50 cents, if the obligation does not exceed $20, and in the proportion of $1 for all sums exceeding that amount.

ART. 7. The legal circulation of all foreign gold coins will be prohibited as soon as the gold coinage of the national mint shall reach $8,000,000; and the legal circulation of all foreign silver coins will be prohibited as soon as the silver coinage of the national mint shall reach $4,000,000. So soon as the coinage of gold and silver shall have reached these amounts, the Executive of the nation shall issue a decree fixing the time for the foregoing provisions of law to go into effect, after which all acts, payments, and contracts must be expressed in national money.

The law contains a number of other provisions, but they are without any public interest outside the country.

In pursuance of the foregoing law, the President has issued a decree establishing the relative value of the old coins and moneys still in circu-

lation with respect to the new unit of value. These values are as follows, to wit:

GOLD.

Peruvian 5-sole pieces, 8.0645 grams, $\frac{9}{10}$	$5.000
Spanish 25 peseta-pieces, 8.0645 grams, $\frac{9}{10}$	5.000
Spanish-American ounce of 27 grams, 875	16.275
Brazilian 20,000-reis pieces of 17.926 grams, 916⅔	11.320
Eagle of the United States of 16.717 grams, $\frac{9}{10}$	10.360
Chilian condor of 15.253 grams, $\frac{9}{10}$	9.454
Spanish doubloon of 8.336 grams, $\frac{9}{10}$	5.165
English sovereign of 7.981 grams, 916⅔	5.046
French 20-franc pieces, 6.451 grams, $\frac{9}{10}$	4.000

SILVER.

Chilian, Peruvian, and Bolivian peso of 25 grams, $\frac{9}{10}$	0.840
Bolivian peso of 20 grams, $\frac{9}{10}$	0.670

As I have already stated, the "peso" or new unit of value under the law of November 5, 1881, is .033 cent less than the "peso fuerte" under the former law of September 29, 1875. In other words, 1 "peso fuerte" is equivalent to $1.033 "pesos" of the new coinage; 10 "pesos fuertes" are equivalent to $10.333 "pesos," 100 "pesos fuertes" to $103.333, &c.; or, making the reduction the other way, 1 "peso" under the new coinage law is equal to only $0.997 in "peso fuertes" under the old law, and so on.

It will be observed that the Argentine "peso" or unit of value is only of the weight of 25.1 English grains, while the American dollar or unit of value is 25.8 English grains, thus making the American dollar worth $1.0364 of the Argentine.

The National Government of the Argentine Republic has already ordered that the public accounts shall be henceforward kept in the new "peso" or unit of value; and the minister of finance, a few days ago, sent circulars to the governors of the several provinces, asking them also to conform their public accounts to the new law.

It is stated that the national mint is now running day and night, with a view to being able as soon as possible to put in circulation the eight millions of gold and the four millions of silver dollars provided for in the seventh article of the law, after which no foreign coins will be permitted to be used as money within the limits of the republic.

At the present time these coins furnish all the gold that is required by the exigencies of trade in the Argentine Republic. Indeed, the Argentine Republic has never had a metallic currency. In some of the upper provinces, under the old Spanish vice-royalty, there was at one time considerable quantities of gold coined, in ounces and half-ounces; and after the separation from Spain there were for awhile provincial mints at Rioja and Cordoba, but since the country became consolidated as the "Argentine Republic" there has never until now been a national mint.

The only circulating medium among the people, as I have before said, is paper money. The two great banking institutions which furnish this are the National Bank, with branches in all the provinces, and whose notes principally circulate in the interior, and the Bank of the Province of Buenos Ayres, whose notes circulate generally. The circulation of the former on the 30th of June, 1881, amounted to $1,819,300 in notes of the denomination of one gold dollar and upwards. The circulation of the Bank of the Province of Buenos Ayres consists of two kinds of notes: those which are called "currency" (*moneda corriente*), of which the unit of value is the old depreciated "peso," whose legal value has been

fixed at four (4) Argentine cents, and those which are called "pesos fuertes," whose value is 100 Argentine cents. Of the former the bank had, at the last report, $398,457,656 "currency" in circulation, which at four cents to the dollar is equal to $15,938,306.24 gold; and of the latter $19,344,240, making a total circulation of $35,282,546.24 in gold dollar notes. By the terms of the new coinage law, all these notes must within two years be withdrawn from circulation and replaced by notes corresponding to the new monetary unit.

E. L. BAKER,
Consul.

UNITED STATES CONSULATE,
Buenos Ayres, March 14, 1882.

THE ARGENTINE CONTINENTAL EXPOSITION.

REPORT BY CONSUL BAKER, OF BUENOS AYRES.

The continental exposition of the Argentine Republic, in celebration of the third centennial of the City of Buenos Ayres, after many embarrassments and delays, was duly inaugurated and opened to the public on the 15th instant.

The day was most propitious, furnishing an opportunity for a grand display of military, with fire-works in the principal plazas at night.

The ceremonies on the occasion, though simple, were quite interesting, and were witnessed by the principal officials of the national government and of the provinces, the diplomatic and consular corps, the officers of the army and navy, the national and provincial legislatures, the dignitaries of the church, the judges of the various courts, and about 5,000 other invited guests. None others were admitted to the buildings. The national Argentine hymn having been sung by the troupe of the Colon opera house, Ex-President Avellenada, who is the honorary president of the "Club Industrial," under whose immediate auspices the exposition is held, proceeded to deliver the opening address—quite an eloquent production—after which President Roca, in a short speech, declared the exposition open. I inclose translations of these addresses.

The exposition occupies the whole of Plaza "Duce de Setiembre," about seven acres in extent, and the buildings, made of wood in rather artistic style and covered with fluted zinc, present a decidedly attractive appearance. They are ranged around the four streets which bound the "Plaza" with large areas inside, laid out in gardens, miniature lakes, kiosks, restaurants, &c.

The display itself, in the amount and variety of the exhibits, is a surprise to everybody. As you are aware already, only the countries of Central and South America were invited to contribute generally—Europe and the United States only being permitted to exhibit machinery. All those countries are represented except Peru and Bolivia, their unfortunate condition, since their war with Chili, not permitting them to take part.

As yet the different sections are not all fully arranged, and some of them are not even opened to the public. It will probably take a couple of weeks more before all the different countries will have their exhibits ready, and perhaps still a couple of weeks more before the catalogue is printed; but it is already evident that there is much, very much, to see and admire.

Of course, what the United States and the countries of Europe display in the way of machinery, after their magnificent exhibits in our own recent Centennial Exposition, would be a twice-told tale to you, but the natural products and manufactures of the provinces of the Argentine Republic and other South American countries are probably in greater display here than on the occasion referred to, and I shall hope to be able hereafter to make some report in regard to them as matters of special interest to our own people.

At present, I can only say that the Centennial Exposition (though inaugurated a little late in the season) promises to be a great success, and especially as displaying the progress of this country in the arts and industries and in many branches of manufactures, and which are destined to make it, by all odds, the leading nation of South America.

The city is now full of people from the provinces and from the neighboring countries, and the exposition is the daily resort of thousands of men and women. Buenos Ayres, as well she may be, is not only gratified but proud of this her first general exposition. As ex-President Avellenada says in his address, the world *is* beginning to take note of the Argentine Republic "as a young and powerful nation founded upon free institutions, with its internal peace assured, and in possession of vast territories *in which the surprise of empires, suddenly born among the forests of North America, may be repeated.*"

E. L. BAKER,
Consul.

UNITED STATES CONSULATE,
Buenos Ayres, March 22, 1882.

THE BUENOS AYRES EXHIBITION.

Speech of Ex-President Avellenada on the opening thereof.

Mr. PRESIDENT OF THE REPUBLIC:

GENTLEMEN: I am charged by the "Club Industrial," which has prepared this exhibition, to request you to inaugurate it solemnly in the name of the nation. It is the first exhibition extending beyond its own geographical limits which has ever been celebrated by this republic, and it ought to be opened under the shadow of its glorious flag, which is so well known in America, and be proclaimed by the voice of its Chief Magistrate.

Mr. President, you will soon walk over this building, and you will see that our call has been replied to from every place reached by its echoes, and that the number and origin of the articles on exhibition make this really and truly a national and continental exhibition. It represents our most powerful impulse in the paths of progress and of industry, it being noteworthy that it has been born in the bosom of the people, as if instinctively inspired by a natural feeling of greatness which would not be suppressed. It is, moreover, the greatest movement that has ever been made in this part of America, seeking those universal relations of commerce which, to-day more than ever, form the links of human solidarity, and which are represented by the interchange of products by the star of navigation in the great oceans and by the immigrant who arrives at the desert territories by the railway like a new centaur riding on his iron horse.

Gentlemen, it has been rightly said that an exhibition is the modern "Forum" to which the nations of the earth are convoked. It might perhaps be more truthfully said that it is an universal microcosm, a small but living representation of future humanity.

By the light of these grand spectacles the day may be seen when every man will have within his reach that which is the most remote, such as the "helecho" which grows, though hardened by the polar frosts; that which is most audacious, like the spectroscope, which calls the sun down to the sage's study for him to examine whether the spots on it are anything but scratches upon its luminous surface; that which is commonest, this being the designation of what is the product of every clime; and that which is the most hidden, like the metals taken from the darksome bowels of the

earth, and the vegetable products raised from the depths of the sea, where they perhaps afforded food for the coral, that patient builder of islands and continents, whose refuge is in deeps beyond the reach of storms, and which is already disturbed in its dark and silent abode by the hand of man.

There is not surely any spectacle like an exhibition to make one feel the human brotherhood alive and powerful, showing really that there are no separate peoples, for civilization has shed its blessings upon all, because the human mind transformed and enlarged is the common patrimony of all, and because every man through seas and boundless territories works for some other man. The sentence which passed, smiling with irony, through the lips of the comic poet of Rome two thousand years ago resounds to-day in these buildings like a hymn of power which subdues the earth. "I am a man, and nothing human is strange to me," "*Homo sum, et nihil humanum a me alienum puto.*"

This solidarity in industry, in science, in commerce is not for civilized man alone, but also for those who live under primitive barbarism.

One of our commercial reviews said not long ago that the showy feathers taken by our savage tribes from the birds of the desert were in more demand every day.

Why are they so much in demand? Where do they go?

The British merchant carries them to the mysterious regions of India, and the grandees there wear them in their costumes, together with tinkling bells, when they enter their temple, the name of which is only interpreted through the doubtful knowledge of the missionary.

Hence, the link is universal, and the Patagonian Indian who, sheltered by a rock from the Andes, engraves his signs with the point of his arrow, as was done in the age of stone, exchanges his products with those bronzed nations, the leaders of the human race, who write their strange characters from right to left, after a lapse of six thousand years.

We tried a national exhibition in Cordoba, and now, after ten years, we come to try a continental one in Buenos Ayres under a vaster plan, as if foreshadowing, after another decade shall have passed away, the future universal exhibition which will bear our name, when the call of convocation, issuing from the shores of the Plate, will resound throughout the earth.

These will be the milestones we will strew along the road for the measuring of our internal advancement, the progressive growth of our commercial relations, and the very size of the daily increasing shadow we throw across the stage of life.

All the nations which partake with us of the habitation of the South American continent are here represented by their products, their industries, and their natural resources. The powerful empire which hardly has any competitor in supplying the world with the products of the tropics, and all those nations, including Mexico, in whose veins our blood flows, that were as we were, Spanish colonies, and which are with us associated in that fruitful and tumultuous movement through which they are everywhere developing their interior prosperity, overcoming distances and populating the desert at the same time that, with varied success and amidst tragical or dramatic vicissitudes, though with a constant singularity of purpose, they found free governments.

Peru, nevertheless, is wanting. That wealthy and famous city, which was called the City of Kings, and which in its colonial epoch was the rival opposed by America to the very metropolis of Spain, is wanting, and her very absence makes her more nearly present to our South American hearts.

Bolivia, our sister, is also absent, but we see her from our frontiers leaning upon her high mountains and awaiting in her solitude the arrival of the rails we stretch towards her as we ford the broad rivers, which, having their origin among her mountains, extend as far as the Plate.

How much progress will be sincerely noted by the observer who compares the results of this exhibition with those of the Cordoba exhibition, held ten years ago? Peace, without which labor is impossible, reposes upon the profound sentiment of interior security, and if difficulties, such as are inherent to life itself, are foreseen, those conflicts which are born of internal antagonisms are no longer to be discerned among us. During the last ten years we have completed our political organization, at the same time that we have enlarged our civilized dominions, taking extensive territories and navigable rivers from the savage who possessed them.

Hitherto we have not found under our soil the coal and iron which preside over the general movement of the world, but there were displayed upon its surface, unperceived, kaolin, out of which porcelain is made; marble, which will arrive to-morrow, by rail, from Tandil, to be spread upon the pavement of this beautiful city, whose glorious destiny we have restored, proclaiming it the capital of the republic, and the unfathomable lakes of petroleum in Jujuy, with which we shall illuminate the earth, unless it be that we arrive too late as producers of light, and find ourselves superseded by the electric light, which presents itself to-day more than born of material products, as a splendor of human intelligence.

All these objects are now in the exhibition. But how have those which already were known grown? Sugar from Tucuman was exhibited at the Cordoba Exhibition as a mere sample; to-day it is manufactured in millions of arrobes, supplying the consumption of half the republic. Santa Fé cereals were merely shown there to prove that the soil flourishes under the foot of the immigrant; and they now afford occupation for fifty thousand men, and their presence has been hailed as the revealer of new markets of produce as one of those aids which come unexpectedly to ameliorate the condition of the laboring classes.

It was known that we produce raw materials, through our interchange, our universal interchange, of commodities, but the promoters of the exhibition have also been desirous of proving us capable of industrial progress, of showing that our products are numerous, and that they are worthy of our efforts. Why should we rest satisfied with having the fruits of industry concentered forever in definite places of the earth, since labor and industry follow the footsteps of man, going wherever he goes, and since there is nothing to prevent their exercise in new countries even without any previous preparation.

The "Club Industrial" has shaped its efforts in accordance with these views, and it now wants the verdict of public opinion. Its desires are for the future. In the inventory of wealth industry figures in the first place, and the calculation is known by which Humboldt, seated under the shelter of the fabulous Mexican mountains, exalted labor by showing how the shoemakers of France had produced more wealth during three centuries than all the gold and silver which had been extracted from those mines, the wealth of which was considered one of the wonders of the world. We want and need to be tradesmen, and we must not forget, therefore, that the labors of tradesmen only find their application in the accumulation of capital which is managed by science, and that they fall into inanition when they are not directed by the genius of free institutions.

Gentlemen, I have mentioned the promoters of the exhibition and I feel that I must devote a few words to them.

How many vicissitudes has not the project of a centennial exhibition proposed by the "Club Industrial" passed through? They have been those of the nation itself during the last three eventful years. From the very first public attention was diverted by other things and the calls of the propaganda were unheard. Means were wanted, and they had to be provided by the promoters themselves, who took the amount of their subscriptions from the proceeds of their daily labors, because the Club Industrial is formed of eight hundred tradesmen, among whom there is not one wealthy man. Finally the promised end was reached, the struggle appeared to be ended, and the triumph was at hand. The mythical exhibition was at last a reality, it could be seen and touched by the hand, the building was almost ready, when the hurricane came which scattered the lofty structure over the ground; without, however, shaking the iron will of its steadfast builders, who recommenced the work on the day following the catastrophe, preventing even the announcement of a postponement, and with an obstinacy which in those days was called capricious, and which in future will be called historical.

Contemporary noise is not always the forerunner of true glory, and celebrated events in the view of the proud and vainglorious may have been forgotten forever, whilst a date will be recorded in history which has hitherto been unknown, *i. e.*, the 23d of August, 1875, when fifty Buenos Ayrean tradesmen, moved by the public calamities and by the hardships of private individuals, formed a society having for its object the amelioration of the affairs of commerce and of the public among all classes of society. It was they also who, in 1877, inaugurated the exhibition at the National College to overcome the panic created by the crisis, and to show that nothing is lost when there remains a working people.

Mr. President, my task is ended. The instruments of free labor, the products of our soil, the advancement of our intellectual culture, and the works of our hands, which are not, in fact, anything but the first fruits of awakening industry, are about to be exhibited.

You may say, however, that our producing power has grown beyond every other example in this part of America, affirming at the same time that it will continue to grow in still greater proportions as we increase our numbers through immigration, as we develop intelligence through education, and as we accumulate the capital we have formed of our own savings, or derived from the credit we have established forever at the cost of great sacrifices.

At the same time that you exhibit our products, it is yours to exhibit a young and powerful nation founded upon free institutions, with its internal peace assured, *and in the possession of vast territories in which the surprise of empires suddenly born among the forests of North America may be repeated.*

Mr. President, I congratulate you sincerely on the inscription of such a day in the history of your administration, causing your name to be associated with the greatest exhibition ever held in South America.

Gentlemen, there are no accidents in history. People and nations are born under certain conditions of development, which impart to them an indelible character, and which only appear to be different in their expression according to the times in which they live, remaining ever the same in substance. We are the cosmopolitan nation of South America. Every language of the world is heard spoken in our streets. We call those who come from abroad "foreigners," because we have no other name for them in our vocabulary. But the word has lost its meaning with us, for almost as soon as he arrives here he ceases to be a stranger.

We grow inwardly, but we expand outwardly, and future historians will note, in mentioning this law of our being that, when Americans determined to be free, we carried the sword of emancipation in triumph through three nations, and that sixty years later we are the first to convoke these same free nations, in the enjoyment of their liberty, to a competition of free labor.

The people of San Martin are the people of the first continental exhibition. May that law of expansion in everything that is good, in liberty, in human love, be forever the glory of the Argentine name, the sign of glory and of redemption which shall cover our faults, and, in the midst of unceasing changes, the never-failing law of our history "*in manis lex.*"

N. AVELLANEDA.

His Excellency President Roca, the president of the republic, replied to the above brilliant speech, which was most enthusiastically applauded, in the following graceful terms:

REPLY OF PRESIDENT ROCA.

GENTLEMEN: This feast is one of the many signs of the epoch of peace and prosperity through which the Argentine Republic is passing.

It is barely emancipated from its internal dangers and labors, when it raises its spirit and finds itself the ruler of its own destinies; and that sentiment of American fraternity which burned in the hearts of the founders of our emancipation, who could think neither of liberty nor of independence except as a boon for the whole continent, revives in the bosom of an Industrial Society, with other ends and other purposes, on these same shores of the Plate.

This competition of labor, the second one I have had the honor of inaugurating during the short time I have been in power, both due to individual effort, apart from the importance it has when viewed from a material standpoint, owing to the number of articles exhibited, the variety of trades represented, the different products of the soil and of the ingenuity of man, and the different countries represented, has a so high moral signification which opens up new ways and discovers new horizons for the material progress of this part of the continent. It is the first step taken towards the community of the nations of South America, which, because of the vast scene of their development and their countless riches, are destined to carry some day the torch of liberty in their right hands, and on their shoulders the responsibility of human culture and civilization, when other people and other races shall have accomplished their journey, like the East, Greece, Rome, Europe, and to-day North America, following the immutable laws of history.

The idea of a continental confederation, a generous dream, the persistent aspiration of all the great thinkers of the new world, has not failed so often because of its chimerical nature, but because what was sought was the association of the political rather than of the material destinies of the people.

The links of a common race, the community of institutions, the speaking of the same language, and the coming from the same origin, are not sufficient motives for the perpetuation of close and sincere alliance among nations. The community of interests, the connection of mercantile relations, the emulation of trades, and the continental interchange of products are necessary in order to draw nations together and to level their frontiers.

What was foreseen by the gigantic spirit of Bolivar; what was projected by Monteagudo on the eve of his death; what was desired by the Panama Congess of 1826, and by the Congress of Lima of 1848—all the attempts at American federation which have hitherto failed—are realized to-day, at last, though imperfectly as yet, on the borders of the Plate, the starting-point of the greatest evolution in South American history.

The continental union will be effected, not under the auspices of martial victories, but under those of peace and of the conquests of labor, and it is in their savory fruits that we must seek our reciprocal well-being. Had we convoked a Congress to give a form to that tendency of union which has had such brilliant interpreters, we should not have seen here one half of the representatives of the continent.

Distrust, jealousy, rivalries, would have frightened some and kept away others. But in this assembly all the American nations are represented, excepting those which are weighed down under the misfortunes and the calamities of war, or which, owing to the great distances to be traversed, have not been able in so short a time to make due preparation. How are Mexico, Venezuela, Brazil, Chili, the Republics of Uruguay and

Paraguay, which have hastened to respond to this call of friendship and of peace, not withstanding the fact that it is only the creation of a society of tradesmen, formed of men of different nationalities, who have made their home in Argentina, attracted and mixed with the common mass of population by that irresistible leveling power of democracy which is found in young countries which are full of promise, a force which so exalts the human race that it makes all equal before society, before the law, before the right, and before God.

GENTLEMEN: Accepting the honorable charge I have received from the association, promoting this feast, and which has just been expressed anew by the honorable President, and thanking in the name of the Argentine Republic all the friendly nations which have helped with their gifts and their products, I declare our first Continental Exhibition opened.

JULIO A. ROCA.

NATIONAL BANK OF HAYTI.

REPORT BY CONSUL-GENERAL LANGSTON, OF PORT-AU-PRINCE.

For the past nine years American silver has constituted the principal part of the circulating medium of Hayti. Within the past two years and a half a large amount of Mexican silver dollars has been imported, and this money has circulated freely in the country. Within the same period an amount of Haytian coins, bearing the effigies of Boyer and Petion, variously estimated at from fifty to a hundred thousand dollars, has been remonetized and again put in circulation by the government. If to these several elements of silver money there be added a small amount of American, English, French, and Spanish gold, the aggregate of the whole, both kinds of specie, amounting to about seven millions of dollars, one will have, substantially, the sum total and character of the currency which has been employed in this country for the period indicated.

It was in this monetary condition of the country, on the election of General Salomon to the presidency of the republic, that the proposition to establish a national bank, upon foreign capital and by grant of special concession, was considered and determined by the Haytian National Assembly.

The upshot of the matter is presented in a contract with "La Societe Générale de Credit Industriel et Commercial" of Paris, for the establishment of such institution upon concession for fifty years.

The bank founded under the auspices of the above society is a joint-stock company, with its seat of superior administration at Paris. It has a council of administration composed of distinguished Parisian financiers, of which Mr. Lehideux is the president. Besides such council, it has a secretary-general, who has charge of the offices at Paris, and a chief and subordinate director at Port-au-Prince, with such employés as the service of the principal establishment here seems to require. Hereafter, not long hence, there is to be constituted in this city a council of administration and discount, whose membership will consist of conspicuous representatives of the local commerce. In the principal open ports of the republic there will also be appointed agents of the bank, whose duty it shall be to guard and promote its service.

The capital of the bank consists of 10,000,000 francs, or $2,000,000. It has the exclusive privilege of emitting bills, which shall pass current throughout the country, provided that the amount of such bills shall not exceed the treble of its metallic reserve, and that they be redeemed on presentation at the bank at Port-au-Prince, or at its branches in Hayti.

Such bills shall be of the denominations of 5, 10, 20, 100, and 200 gourdes, the bank being left free to determine the amount of each sort.

The bank is engaged to have struck and issued 2,000,000 gourdes of new national money, gold and silver, according to the money unit fixed by the government. Already it has received from Paris some $300,000 of this sum, in gourdes and ten-cent pieces, which it is gradually putting into circulation.

The gourde is equivalent, at par, to the French 5-franc piece, and the weight and alloy of all the pieces of such money shall be conformed to the regulations of the monetary union.

The bank is obligated to discharge the service of the treasury of the government of Hayti, to receive upon collection all sums due to the state, notably all duties of the customs upon imports and exports. It is also charged to make all payments on account of the state, as regards the interest and redemption of every debt, internal and foreign, to the extent of a credit to the government of $300,000, which the bank engages to advance.

The bank is authorized to deduct from its collections the funds required to meet the demands of the public service. Such service of collection and payment by the bank was on the 26th of July last made the subject of special regulation as between the secretary of state for finances and such institution.

The commissions allowed the bank therefor are fixed by the contract at 1 per cent. upon collections, and one-half per cent. upon all internal payments, while one-half per cent. more is added where the debt is foreign, to compensate for loss caused upon exchange.

In addition to these matters of service, and the compensations resulting therefrom, the bank is authorized to perform all the ordinary operations of a bank of issue, deposit, loan, and discount, as well as all general business conducted by such institution.

During the continuance of the concession to the bank, the government obliges itself to issue no paper money, to authorize no bank nor establishment with privileges similar to those granted to the Bank of Hayti; and further, it agrees to protect the bank against every enterprise which might injure the rights resulting from this concession to its profit.

As regards special advances made to the government other and additional to the three hundred thousand dollars already mentioned, they shall be regulated and balanced every three months, and they shall bear interest at the rate of 6 per cent. per annum; and besides, the state shall allow the bank thereon a commission of one-half per cent. quarterly.

In its civil character, the bank is to be regarded and treated as enjoying Haytian citizenship, and hence it may contract, acquire, and possess real property anywhere within the limits of the country, and enjoy all rights and privileges whatsoever accorded by law to the citizens of the republic.

It is accorded all necessary military protection at its principal seat and its various branches, and the President is forbidden to pardon any person prosecuted and condemned for counterfeiting its bills and coins.

The bank and all its branches are entirely exempted from taxes and duties of every sort, as well as regards their bills, orders, and checks as otherwise.

It is required to publish a monthly account of its condition in the

Moniteur, and should differences arise between it and the government, these are to be determined and settled by arbitration.

The contract by which the establishment of the bank was settled, and the stipulations mentioned were fixed, was made on the 30th day of January, 1881, at Paris, in accordance with the law of France of July 24, 1867, upon companies, and in accordance with the decree of the national assembly of Hayti, providing for the creation of such institution, passed September 10, 1880. Mr. Charles Laforestrie, secretary of state for finances, commerce, and foreign affairs of this republic, signs it on behalf of the Haytian Government, and Mr. Henrie Durrieu, president of the council of administration of "la Société, générale du crédit industriel et commercial," on behalf of such association.

The principal establishment of the bank, at Port au Prince, was formally opened on the 1st day of September last, and since that time its transactions, according to report, have consisted chiefly in installing its working force, in assuming the management of the government treasury, commencing this service on the first day of last month, in seeking to put its silver coins, the gourde and ten-cent piece, in circulation, mainly by exchanging the same, as demand has been made at its counters, for Mexican silver dollars, and in performing such general business with the government as circumstances seemed to necessitate.

Of course the bank, dealing with the creditors of the government abroad, and undertaking to transact a general banking business not confined to the country, will be compelled sooner or later to establish business relations and correspondents in the various principal commercial cities of the world. Already it has established such relations in the city of New York, and on the last steamship leaving this port for such city on the 7th instant the bank shipped to its correspondent there the sum of $56,000 in Mexican silver dollars, to be exchanged or transshipped to London for sale.

For some time the trade between the United States and Hayti has been considerable. With the improved facilities now being furnished by the tri-monthly departure of steamships from New York to this country, this business will probably be greatly increased, and the transactions had by the bank with citizens of our country may be numerous and profitable.

In addition to the advantages already named as accruing to the bank, the government engages to withdraw from circulation all moneys now passing current in the country within one year, and to assume any charge and loss connected with such operation, the bank only being required, in that behalf, to lend its assistance to the government in replacing such money by the new national currency.

Sound business wisdom, as well as intelligent patriotism, would suggest that the most comprehensive and liberal policy be cultivated in connection with this particular branch of the subject.

Foreign specie circulating in the country with which the people are familiar, and whose value is settled, may very wisely be treated as subsidiary to the national currency.

The government exercises control with respect to the operations of the bank through a special commissioner appointed by the minister of finances, who is charged to see that the conditions of the concession made to it are strictly performed, and such commissioner is empowered to interfere in the administration thereof when such conditions are neglected or violated.

The government has the right also to appoint a special commissioner at Paris. Its commissioner already appointed for Port au Prince is Mr.

P. A. Bois, formerly the president of the chamber of accounts, a man said to be well qualified to discharge the delicate responsibilities of the position to which he has been called.

Although the proposition to found the bank was, at first, received with considerable disfavor, and, during the somewhat protracted period occupied by the agent of the government in negotiations at Paris for its establishment, many discouraging predictions were made with respect to the result, its inauguration at Port au Prince has been regarded with kindly feeling by all, while by its more earnest and active promoters it has been welcomed in the warmest manner, as promising to meet important financial administrative as well as monetary wants of the country.

In his message of the 18th of August last, addressed to the National Assembly, the President of the republic, in speaking of the establishment of the bank, employs the following words, as translated from his French:

> The bank about which malevolence has sown so many contradictory reports is an accomplished fact. The full and entire operation of this institution, which diverse circumstances have retarded up to this day, will very soon dissipate all misunderstandings and all errors which political passion, inveterate prejudices, or interests apprehensive, and without reason, have accumulated.
>
> The double character which distinguishes our bank, that of an institution of credit and of a regulator of our administration, would have been incompletely assured if financial regulation had not been established for the résumé of our laws of administration, to introduce order into the public services, and to accomplish the removal of the obstacles engendered by the deplorable habits in which the financial, moral, and political trouble is reflected, to which our community has been too long the prey.

Should the result predicted by the President in these words be secured to the country and government through the agency of the bank, its establishment will have been entirely justified.

JOHN MERCER LANGSTON,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
Port au Prince, Hayti.

FINANCIAL AND COMMERCIAL PROSPECTS IN HAYTI.

REPORT BY CONSUL-GENERAL LANGSTON, OF PORT AU PRINCE.

It is, perhaps, true that Hayti has never experienced a more depressing financial and commercial condition than that through which she has been passing for the past six months, and in the midst of which she finds herself to-day. Three circumstances may be indicated as the causes which, conspiring, have produced this effect.

First of all, coffee, the chief and most profitable production of this country, has been extremely short in its yield this year; and the price paid for it, here and abroad, has been unusually low. Then there have prevailed constantly during the year rumors of probable revolutionary movements in the different parts of the country, till on the 8th of last December a movement was actually made at St. Marc, and that city and Jacmel and Port au Prince were declared to be under martial law, many arrests of suspected persons being made in those cities; and the arrested parties confined in the different prisons of these places were finally sent for trial before a military commission to St. Marc, where their several cases are under examination at this time. And even now

there exist such rumors of impending revolutionary movements at the Cape and thereabout, that the President left the capitol on the 12th instant for a brief sojourn in that part of the republic, hoping by his presence, doubtless, to allay or subdue all feeling hostile to his administration, and prolong thus the general peace of the country.

In the next place, small-pox starting at Cape Haytien, about the 1st of September last, has passed thence working its way across the country southward, as an epidemic, decimating the population of the prominent cities of the country, including the Cape itself, Port de Paix, Gonaives, St. Marc, Port au Prince, Petit Goâve, Miragoane, Jereimie, Jacmel, and their immediate neighborhoods, and the people of many smaller unopen ports and their environs. Ten thousand persons, men, women, and children, have been cut down by this fell, cruel destroyer; and general business has been adversely affected on every hand and everywhere by it in this island.

The present condition of the country as regards the great scarcity of money and the utter stagnation of all business, commands the anxious attention of the government authorities, those engaged in commerce, and the people generally. What is to be done is asked by all; and the answers thereto are as numerous as they are unsatisfactory. Three plans only suggested, however, deserve mention here.

It has been proposed in the first place that the government cause to be issued, through the National Bank of Hayti, two millions of gourdes of paper money, to be redeemed in four years, in annual installments of five hundred thousand dollars per annum; and that the government, in order to meet its guarantee to be made in this behalf, written upon the face of the bills thus issued, increase the duties upon such articles of importation as flour, pork, beef, codfish, and other provisions, mainly imported from the United States of America. This proposition, however, at first announced with no little confidence by certain persons, composing a special commission of merchants said to have been invited by the government to give it the advantage of a wise and judicious business judgment on the subject, has, after having been quite thoroughly examined and considered in the journals of the country and otherwise, been, for the time being at least, entirely abandoned.

The present administration of the government is thoroughly committed against the issue of paper money in this country by the government, and it was difficult to understand from the very beginning how it could give its sanction to such a financial scheme. It seems now, at last, that it does not approve it, and the general sentiment of the country appears to be against it.

But the second plan proposed is to increase the duties upon the articles of importation named, and thereby at once increase the income of the government and improve the industry of the country, multiplying the productions of export and compelling the growth of things, according to the necessities of the people, most of which, in the existing prostration of their national agriculture, are at present imported. This plan, burdened with difficulties apparent to the least thoughtful, by no means really promising increased revenue to the public treasury, nor improvement, with any certainty, to agriculture, has failed, so far, to win general approval. It has been intimated, however, that the government favors the increase of duties in this regard, and that in the next session of the Corps Legislatif this subject will be considered and such increase of duties be made.

The third plan which has been proposed, with greater diffidence and misgiving than either of the others named, and with far less hope of its

adoption, is the one which advises that the outlays of the government be brought within the compass of its receipts, and that the general industry and agriculture of the country be stimulated by such judicious and encouraging expenditure and management on the part of the government as to make labor, general and agricultural, in the country honorable and remunerative. This is the correct and true plan, the one which, if it could be made practicable, would assure the real good of the country and the probable peace and stability of the government.

As bearing at once upon the general condition, financial, industrial, and commercial, in this country at present, and as showing the judgment and purpose of the government with regard thereto, circular No. 548, issued by the President himself, and published in Le Moniteur on the 18th of February last, as translated, is presented, as follows:

PORT AU PRINCE, *February* 18, 1882.

Seventy-ninth year of the independence. Circular No. 548.

SALOMON, President of Hayti, to the commandants of the arondissements and of the communes; to the administrators of finances; to the commissioners of the government; and to the parochial magistrates of the republic:

GENTLEMEN AND FELLOW-CITIZENS: Since my advent to power, the condition of the public employés and of the army has been the object of my greatest solicitude. I have exerted up to this time (and especially since the establishment of the bank) all my powers that service of the salaries, of the pay, and of the rations might be made as regularly as possible.

Nevertheless, it appears from the reports which come to me that the public officers complain of the delay in the discharge of their certificates.

The principal causes of this delay result, 1st, on the one part, that the ordinances, in virtue of which the bank delivers checks, are not always arranged conformably to the regulations, through the lack of experience on the part of employés who prepare them. In such case the superior administration is obliged to return these documents to be made over again, wherefore there results loss of time; 2d, on the part, that at the post-office on board of the boats of the ligne accélerée, and even in the bureaus, it happens sometimes that the employés do not attend to the expedition of such checks with all due diligence.

The most severe orders have been given and precautions taken that hereafter the acts above cited be not repeated.

Certainly such acts are to be regretted, and I am the first to deplore them; but do they authorize those receiving salaries of the state, because of the delay of eight days, fifteen, or even a month, to receive that which is due them to show themselves impatient, and to make complaint, as I am advised they do? Instead of complaining they ought to thank my government, which does not leave them to suffer. Such salaried persons ought to be reminded that at my advent to power they were with difficulty or not at all paid; that there was due at least seven months' salary to the employés of the civil class, and to the army a year and more of pay and rations.

In the past, the bearer of a certificate of salary was obliged to discount it at 50, 60, and 70 per cent. loss. Hence it was that an officer with the salary of $100 per month received only from $40 to $50. To-day, the officer does not sacrifice his certificates; he receives thereof the whole amount. Those who complain show themselves unjust towards my government.

This is the occasion, gentlemen, to speak to you of the difficulties and embarrassments of the present situation. On the one hand the continuance of the drought; on the other, the overflowings of the rivers which have taken place in several localities to the great damage of agriculture, has reduced by one-half for the year 1881-'82 our crop of coffee.

To this unhappy cause there is to be added the great decline in price of this product in the foreign markets. The countries which formerly did not cultivate coffee, produce thereof to-day upon a very large scale; thence a large abundance of this bean comes into Europe, and this abundance surpassing the wants of the consumers, the price of coffee is found necessarily reduced; nevertheless, those of other countries being better and more thoroughly prepared than ours, obtain always a higher price. These circumstances combined have led to diminution of one-half at least of our receipts and of the public income; this explains the crisis through which we pass at present, and which will be one of the most lasting and one of the most cruel which our country will have to record in its annals.

From now to the month of October our people will experience sufferings against which it is important to take immediate measures and precautions.

Our duty from the present is to speak to the people; to make them understand the necessity for each to seek from our earth the most that it is able to yield; to make them to understand that besides our coffee, dethroned by competition, that they ought to cultivate cotton, the price of which is sustained, cocoa, tobacco, castor-oil, productions of food, such as rice, corn, pistachio, fig-bananas, yams, cocoanuts, tapioca, &c., &c., in order that all these products, instead of being received from the foreigner, may be sent by us to him as was done 25 years ago.

The soil of Hayti is fertile beyond any comparison, and yet work is so abandoned with us that it is the foreigner who feeds us. Shall we expect from him rice, beans, corn, potatoes, cabbage, and other vegetables, when we have only to sow the seed thereof in order that they return us a hundred fold?

We buy lard, pork, when nevertheless we have hogs with our sweet potatoes we are able to fatten so easily. We buy codfish, mackerel, herring, when nevertheless we have salt mines in the country, and when we are surrounded by a sea in which fish abound. A beautiful turkey which costs here $1.50 sells in Kingston for about $4. A bunch of fig-bananas which is bought at the markets for from 15 to 25 cents, sells in America for $1 and more. The cocoanut, the orange, the pineapple, of which we almost make no account, are sought abroad and are sold at very high prices. But that money which we give to get codfish, pork, lard, rice, corn, beans, &c., that money would remain in the country, and in our pockets if we produced these same things; and it is so easy to produce them.

And besides, shall we always remain dependent upon the foreigner, and even at his mercy for our food? There are many incidents the consequence of which lead us to see ourselves suddenly deprived of provisions which are brought us from America; and the consequence, if we were deprived thereof, would be scarcity or famine for us.

The necessity and the duty of the government to create resources for the public treasury, will it not force it one day, and a day very near, perhaps, to do that which all governments do; that is to say, to levy upon articles which the country is able to produce and which the foreigner sends us, taxes which would not permit the further importation of such articles, or if they were imported, would compel the sale of them to consumers at exorbitant prices?

The moment has come, gentlemen, in which it is necessary to pass matters of fiction, expedience, and to meet with good faith our situation. Let the Haytian understand—it is time that it were so—that it is not in public employment and in commerce that he will find his bread and the bread of his family. The salaries which one receives from the public treasury only compose a little part of our expenses; as to commerce, of ten who follow it, nine find there their ruin. I do not speak of jobs; their time is passed.

Our welfare, our safety to all, is in the cultivation of the soil. Let each one, then, give himself thereto with ardor; our intestine dissensions and the absence of security have led us to desert the fields. Let Haytians return to them with confidence, that, thanks to the help which all have promised to it, and upon which it counts, my government will maintain and will fortify this peace and this tranquility which so happily the country has enjoyed since the 23d of October, 1879.

Speak to the people; give them advice in the sense of my present dispatch, and place in the hands of every Haytian a copy thereof.

I count upon you, gentlemen, and fellow-citizens, and I salute you with very high consideration.

SALOMON.

What has been the effect of this circular, issued in very unusual manner by President Salomon, either upon the various officers to whom it is addressed, or upon the people, whom he seeks, as would appear, especially to reach, it is not possible to say. Should it have the effect of increasing labor, and adding to the productions, even the most common and those of the most immediate use, large good will have been accomplished.

JOHN MERCER LANGSTON,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
Port au Prince, Hayti, April 15, 1882.

THE DEVELOPMENT OF EGYPTIAN RESOURCES.

REPORT BY CONSUL-GENERAL WOLF, OF CAIRO.

I have the honor to inclose the annual report of the controllers-general. The financial showing is very gratifying, and proves an economical administration.

I have no doubt, from the temper of the Chamber of Notables and the people of Egypt generally, that the present year will show a still greater balance in favor of good government, notwithstanding the fears expressed by the controllers.

The subsidy heretofore given of nine thousand pounds (Egyptian) to the opera has been discontinued, and this amount will, I am informed, be used for educational purposes. Large salaries will be reduced, useless offices abolished, and every effort made to win the confidence and good wishes of every friend of Egypt outside of the powers materially interested the other way.

The future of Egypt lies greatly, if not altogether, in the direction of education, and being permitted as far as is possible to govern and administer her own affairs. To show the improved tone, on the part of English opinion, I inclose an editorial of the Egyptian Gazette, date March 18, 1882. This journal has heretofore strenuously insisted on the reverse of what it now graciously grants.

The conduct of the ministry now in power has been most admirable, calm in temper and judicious in action, and has surprised friend and foe. While it is almost impossible in this land of intrigue to guarantee anything for more than 24 hours, yet on the surface, and to judge from the opinion of the people, there is every indication of the stability and peace of the Egyptian Government.

The Khedive is certainly imbued with the most enlightened and public-spirited ideas, and has no other wish than the welfare and prosperity of his people, and while he lacks the warlike propensities of his father, he more than makes up for them in goodness of heart and head.

S. WOLF,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
Cairo, March 21, 1882.

EGYPT FOR THE EGYPTIANS.

[From the Egyptian Gazette of March 18, 1882.]

The desire expressed in the heading of this article is one which has much in its favor. As the watchword of a certain party in the state, the idea underlying the expression, "Egypt for the Egyptians," deserves our most respectful attention.

The people of Egypt are gifted with a considerable amount of practical shrewdness, and among Egyptians who have had the advantages of an European education, we cannot fail to recognize that there are many who are equal in intellectual power and attainments to members of other nationalities.

Under these circumstances we are not surprised that a strong feeling should have arisen in favor of natives taking a more prominent part in the administrative services of their country.

To realize the sentiments of natives on this subject we must for a moment imagine our own feelings if the principal servants of the Crown were chosen from among other than natural born British subjects.

We will be told, with some show of reason, that in many matters it is hardly fair to compare Egypt with other countries, such as our own. Yet, while admitting this, we must remember that patriotism is as noble a feeling in the heart of an Egyptian as in that of an Englishman, and the man whose actions are dictated by love of his country is entitled to a fair and impartial hearing.

We will not go over the wearisome ground of recounting the various steps which led to the present system of control and to the large infusion of Europeans into the Egyptian civil service. The fact that the country had been allowed to drift into serious financial difficulties under a ruler who successively broke the various international engagements which were entered into, with the view of getting his country out of the slough of despond into which he had unknowingly, perhaps, driven it, was sufficient to render a radical change in the system of government necessary.

The administrations of the country were under the control of men who had been brought up in the evil traditions of a corrupt régime. It was necessary to make a complete change. The elements for reconstructing the administrative services did not appear to exist in the country. It was necessary to import foreign officials, who would give a healthier tone to the official world, and who would be free to introduce such radical improvements as might ultimately increase the revenues.

How far the plan has succeeded is shown in the report of the controllers. Egypt has progressed with far more rapid strides than even her most sanguine friends ventured to anticipate. Blunders have undoubtedly been made, but *humanum est errare*, and Egyptians must not forget that, in many cases, the work of European administrators has been hampered by that stolid obstinacy of which Oriental races are past-masters.

If all the benefits to be derived from the infusion of European officials in the Egyptian service have not been obtained to their full extent, Egyptians have to thank themselves in some measure for the result. Hitherto the responsible ministers of the Khedive have acted with prudence, and the wholesale dismissal of European officials, which was anticipated when they took office, is not a *fait accompli*.

We would fain hope that they may continue in the prudent path which they have entered. We would point out that it would be a very hazardous experiment to do away with the assistance of experienced European officials, till they have had an opportunity of training up natives in sufficient numbers, and of the required experience, for carrying on the government services of the country on the principles which have led to such excellent results.

In the meanwhile, we certainly consider that every preference should be shown to natives, in filling up vacancies in the large government administrations. Thus, by degrees, we may look for the formation of a strong and independent Egyptian civil service, the members of which would be able to hold their own against any attempt of an unscrupulous ruler to interfere with the honest discharge of their duties.

Belonging to a free nation which enjoys the blessings of a constitutional government, we cannot but watch the development of a national feeling among the Egyptians with a certain amount of sympathy, and if perchance satire is unwelcome to them, on account of its true spirit not being appreciated, we must abandon that line and devote the little influence our journal may possess towards warning the people, whose land we inhabit, against endeavoring to advance too rapidly.

"Slowly but surely" should be the motto of the rulers of the country, and if they act prudently, and do not, by rash or ill-advised measures, alienate the sympathy of the two great western powers, the ultimate success of their endeavors for the regeneration of this historic land will be insured.

THE RABBIT-SKIN TRADE OF NEW ZEALAND.

REPORT BY CONSUL GRIFFIN, OF AUCKLAND.

The increase in the quantity and value of rabbit skins exported from New Zealand within the last few years has been so great as to appear almost startling. Indeed the export of rabbit skins has swelled to such vast proportions that it is now looked upon as one of the most profitable industries of the colony.

Unfortunately, however, it is one of those industries which, strange as it may appear, the people do not wish to see prosper, or at least prosper for any great length of time. The damage done to the crops by the

little animals that furnish the skins for export has been of such magnitude as to become the subject of parliamentary legislation.

INTRODUCTION OF RABBITS INTO NEW ZEALAND.

When the great navigator Captain Cook first visited New Zealand the only land mammals found to be indigincus in the islands were two varieties of the rat and one of the common bat. Some naturalists, however, contend that the rat was not found here, but this view does not appear to be supported by any direct evidence.

About twenty years ago there was probably not a single rabbit throughout the length and breadth of New Zealand, save, perhaps, a few domesticated pets kept for the amusement of children.

According to the customs returns there were exported from this colony in one year over 8,500,000 rabbit skins, the value of which was $473,387. The honor of turning loose the first rabbits appears to belong to Dr. Menzies, of Southland, who liberated a few pairs of the common gray kind on some sand mounds in the neighborhood of Riverton, Southland. This was done, it is said, amid a certain amount of ceremony, a banquet being given, and a number of speeches made to celebrate the event. Sport was scarce at that time, and other rabbits, including some silver-grays, were liberated. They multiplied so fast that the people did not have to wait long, at least for that kind of sport. They increased so rapidly, and the destruction wrought by them was of such a character, that in a few years it became a question whether the colonists, with their flocks and herds, should vacate the country, or whether a systematic effort should be made to exterminate the pests. Whole tracts of hill country had become denuded of vegetation. Sheep were dying by hundreds and thousands. One hill station on Lake Wakatipa which maintained 50,000 sheep, was, in a short time, so deprived of vegetation that it could not support 6,000. The property destroyed by the rabbits is estimated by millions. One sheep farmer only got 900 lambs from 6,000 ewes; another, 2,500 from 20,000; and a third, only 700 from 10,000; and a fourth had no increase at all.

The rabbit begins breeding at six months old, and in New Zealand, where the climate is mild, the trees ever green, and where the grass grows all the year round, it begins earlier than that and continues to breed every month in the year. But even supposing that a pair of rabbits do not breed oftener in this climate than in England, which is seven times a year, and that they only bring forth eight young at a time, they would multiply in the course of four years to the number of a million and a quarter.

EXTERMINATION OF RABBITS.

Various efforts have been adopted for the purpose of destroying these pests. At first different kinds of traps were used, but only with indifferent success. The next plan was to hunt them down with dogs, and to shoot and hunt them on the edges of bushes and in broken land. This plan, although an excellent one, is not regarded with as much favor as that of poisoning them. Hundreds of men and dogs are now employed in hunting rabbits in the South Island.

Upon a farm in Canterbury 150 men were employed, and it was estimated that the cost to the lessee was about four cents for every rabbit skin obtained by the men.

Mr. Douglas, who acted as inspector in the West Oreti rabbit dis-

trict, which comprised about 1,200,000 acres of occupied land, and about the same quantity of unoccupied Crown land, much of which consisted of densely timbered country, or mountain tops with narrow valleys, was able to keep the rabbits down in the low-lying country, but found that they were constantly getting a firmer hold of the river banks and timbered or rough broken lands, and that they gradually worked their way northward.

Many sheep farmers in this district suffered to such an extent that they had to give up their homes and seek other employment.

Although the government had passed stringent laws for the purpose of overcoming the rabbit pest, little progress was made toward abating it until the method of poisoning the rabbits with grain soaked in phosphorus and oil of rhodium was adopted.

The rabbit nuisance now appears to be under control. There are, however, some serious objections to the use of poisoned grain. For instance, sheep are often killed with it. One farmer lost over 12,000 in this way, and it is well known that sheep will pick up the grain, no matter in what way it is scattered.

After a large number of rabbits are killed by the poison it is customary to turn loose a few hundred ferrets or weasels, which soon make quick work of the pests. The ferret while being the natural enemy to the rabbit is also very destructive to poultry, and care should be taken to keep the latter always from the ferrets.

The occupation of killing rabbits in New Zealand has become a profitable one. A good rabbiter can easily earn from $3 to $4 per day, and it is said he is decidedly opposed to their extermination, inasmuch as his occupation would thereby be lost. He may, perhaps, have a sort of reverence for them akin to that of the Hindoo for the snakes he is empowered to kill. It is probably not generally known that a few years ago the British Government in India was so struck with the loss of human life by snake-bites that it resolved to offer a reward for every snake killed.

District officers were appointed to receive the snake-heads, and to pay the fees thereon. For a time the system appeared to work well, but at last it was discovered that there was no abatement in the average annual loss of life from poisonous snakes, notwithstanding the vast number of heads that were delivered to the officers. An investigation was ordered and it was found that the snakes killed by the natives were not obtained in the jungles, but were quietly and comfortably bred and reared for the occasion on the Hindoo's own premises.

The number of rabbit skins annually exported from New Zealand does not probably represent one-tenth part of those actually destroyed. The bush country is especially difficult to deal with. The poisoned grain has to be laid very often about the edges of the trees and brush, and the rabbits after eating it generally retire to their holes, where they die, and cannot be found.

INJUDICIOUS ACCLIMATIZATION.

The millions of property destroyed by the rabbit nuisance and the vast sums of money expended in trying to get rid of it, to say nothing of the endless trouble, toil, and pains it has cost, should be a lesson to those who think no harm will come from the act of turning adrift, in new countries, foreign birds and animals. Indeed many of the pests that afflict the Australian colonies have been brought about by the misdirected efforts of acclimatization societies.

While these societies did not introduce the rabbit, they brought here

a large number of English hares, together with the house sparrows, larks, linnets, and other hard-billed birds, and the result has been an almost irreparable loss to the country.

It is now almost an impossibility to grow grapes, peaches, and plums in New Zealand on account of the ravages made by these hard-billed birds. Vast crops of wheat, oats, and barley have been entirely destroyed by them.

It is found that these birds will not eat insects when they can procure fruit and seed, and the latter articles can be obtained in this colony in almost every season of the year. The English hares brought here have also been very destructive, especially to the orchards and young plantations of forest and ornamental trees. In some of the orchards that I have visited I observed that the bark around the trees, about a foot above the ground, had been entirely gnawed off by them. The trees thus injured either maintain a lingering existence or die as soon as the summer sun pours its rays upon them.

DIFFERENT KINDS OF RABBITS.

The New Zealand rabbit is much larger than the common rabbit of Europe and the United States. It is generally of a rich gray color, and its hind legs are almost as long as those of the English hare, to which it bears a great resemblance. Its ears are long and sometimes exceed the head in length.

In the South Island I have seen large numbers of them of various colors, but generally of a brownish gray, or gray mixed with brown. Some of them are of a pure gray and others of a silver gray.

The color of the rabbit is believed to be a wise provision of nature, resembling somewhat the somber colors of the woods and heath they frequent, whilst those inhabiting the snowy regions become perfectly white.

The rabbit is usually quiet during the day and exhibits its activity in the evening, though they are occasionally seen at all hours of the day and night. Its greatest characteristic is timidity. It will run at the slightest approach of danger. It does not, however, run continuously, but seeks safety by retreating to burrows, which it excavates with great skill. The rabbit is said to cease to pair when domesticated. It has no means of defense except the quickness of its hearing and the rapidity of its movements.

PREPARATION OF RABBIT SKINS.

Immediately after death the rabbits are skinned, and the heads, feet, and all the fat removed. The skins, if the weather is fine, are placed in the open air to dry, but if it rains they are hung up under sheds. Sometimes they are stretched on a piece of strong wire bent over and shaped like a syphon. When thoroughly dry they are taken down, the fur turned in so as to protect it from injury, and then they are tied in bundles from 12 to 20 each and packed in bales, each of which contains from 3,000 to 3,500 skins. They are subjected to but little pressure. Winter skins are not dumped at all. No chemicals whatever are used in preparing them for the market. A little carbolic acid powder is used in packing.

Rabbit skins demand a good price here, and now that a market has been found for them in the United States, it is likely that the price will be still further advanced. They can be bought in Lyttleton and Christchurch, or even in Auckland, at from 50 to 80 cents per dozen, according to the quality.

The subjoined table shows the quantity and value of rabbit skins exported from this colony since 1873.

Table showing the quantity and value of rabbit skins exported from New Zealand for each year from 1873 *to* 1881, *inclusive.*

Years.	Number.	Value.
1873	36,716	$6,315
1874	56,504	9,390
1875	111,142	19,565
1876	311,632	22,090
1877	918,236	43,150
1878	636,409	167,300
1879	5,384,506	233,995
1880	7,505,616	334,860
1881	8,514,685	473,870

It will be seen from the above table that the increase in the value of rabbit skins exported from New Zealand has been far greater than the increase in the quantity, a fact owing to a market having been found for them in the United States and the variety of uses to which these skins are now applied.

USE OF RABBIT SKINS.

A small quantity of rabbit skins are consumed here in the manufacture of hats. Mr. Fenton, a prominent hatter of Queen street, Auckland, makes some very beautiful felt hats out of them. These hats are very soft and pliable to the touch, and are becoming very popular. When the fur is long it is sometimes cut in two and the finer or inner portions mixed with wool.

Various kinds of machines have been invented for the manufacture of hats out of rabbit skins, some of which distribute the hair with marvellous rapidity and evenness, on revolving metal cones, the size of felt cones used by the hatters. After the fur is scraped off, the skins are disposed of for the manufacture of glue and sizing.

Great quantities of rabbit skins are used in Germany and the United States for the manufacture of furs. In Hamburg they are said to be made to look like fine sable, and better than anywhere else. In fact the art of coloring rabbit hair has reached such a high degree of perfection that it can be made to imitate almost every kind of fur used in fashionable life.

G. W. GRIFFIN,
Consul.

UNITED STATES CONSULATE,
Auckland, N. Z., March 21, 1882.

YUCATAN.—ITS PRODUCTIONS, CLIMATE, MONUMENTS, PEOPLE, CUSTOMS, AND COMMERCE.

REPORT BY CONSUL AYMÉ, OF MERIDA.

PHYSICAL CHARACTER.

The state of Yucatan is of the shape of a triangle with the apex to the south; it embraces two-thirds of the Peninsula of Yucatan, the remaining third being occupied by the state of Campeche. The state is

included between 17° 50′ and 21° 40′ north latitude, and 86° 45′ west and 90° 27′ west longitude (from the meridian of Greenwich).

The whole northern portion of the state is a level plain of recent geological formation, resembling the shell formations of Florida. The soil is, over this portion, exceedingly poor, usually but a few inches in depth and very stony. There are no rivers or streams on the surface, but large subterranean rivers are known to exist. Caves, usually of small extent, are found everywhere, always containing water; these caves are called "cenotes." The water has a very distinct current, and is affected by the rise and fall of the tides; the water is very strongly impregnated with lime-salts, and as these cenotes are to-day, as anciently, almost the sole supply of the people, the disease known as goiter is far from infrequent. The poverty of the soil and complete absence of water makes this part of Yucatan very barren. There are no forests, and the uncultivated ground is covered with a dense and tangled undergrowth of thorny plants absolutely impassable.

Fortunately for Yucatan, it is precisely on this wretched soil that the "*henequen*" plant thrives and flourishes. Just west of Campeche a low range of mountains rises, running to the north-northeast a distance of about 100 miles, when it makes an acute angle, and then runs about 100 miles to the southwest.

The average height of this range is about 300 feet. In its immediate vicinity to the north are found large tracts of fertile, rich ground, capable of raising sugar and coffee. To the south of the range extends a vast territory of the very richest soil, covered with huge forests of mahogany and fine woods in enormous quantities; among these may be mentioned the chechem, the buhum, and ironwood. The animals of Yucatan comprise the tapir, exceedingly rare, the puma, four or five varieties of jaguar, and perhaps as many more of kindred species, deer, and jaralis. Ornithologically the state is exceedingly rich, and here it is that the magnificent wild turkey "Meleager ocellatus" is found in the greatest perfection and numbers. The fisheries in the gulf are very insignificant, but in quantity and quality the fish are unsurpassed. Very small but delicious oysters are found at Celestun on the west coast. The mineral products are nil.

NATIVE OR ABORIGINAL RACE.

The Mayas, who form by far the greatest portion of the population, are the direct descendants of the original inhabitants. They are a very hardy, intelligent race. They are of medium or low stature, long arms, legs rather thin, chest full and muscular, profile aquiline, head dolicocephalic. Hair very coarse and straight, bushy; teeth sound, and square in shape; color of the skin, from café-au-lait to dark chocolate-brown. The legs rather bend, probably from the manner of being carried in infancy, straddled on the mother's hip. They are good walkers, and cover great distances in an astonishingly short time. The women are finely formed, sometimes but not often beautiful in features. Morality low. Years of peonage have lowered the intelligence of this very interesting people, and they preserve no traditions of their ancestors. Their religion is a mass of superstitions and absurdities semi-clothed in Roman Catholicism. In 1847 the Mayas throughout the state rose in revolt, the initiative point being at Tepich, a small village in the southwest. Since that time they have occupied almost the whole of the fertile portion of the country, from time to time making descents on towns and villages, plundering, burning, and destroying everything. The head-

quarters of the insurgents is Chan, Santa Cruz, on the east coast. They trade with Belize, and it is claimed are supported in their hostility by the inhabitants of that colony.

In all these years a desultory warfare has been carried on, and it is asserted that their fighting force has dwindled in the last ten years from seven thousand to less than one thousand, and that among these are strong dissensions. Should this be so, we may hope that Yucatan will speedily be able to take possession of and develop her rich territories of the south. Those who have remained under Mexican dominion are in a state of peonage, which while it supposes and styles them free, is worse than slavery. I shall have occasion in this report to touch on this system more fully. The clothing of the men consists of a pair of wide trousers and a long shirt, sandals, and a hat complete this costume. The women wear a species of petticoat, and a peculiar garment called an "uipil." It is a species of toga, cut square in the neck, back, and front, sleeveless, and falling nearly to the ankles. Both of these garments are generally beautifully embroidered and trimmed with lace. The women have generally long, abundant hair, which is worn in a curious knot at the back of the head, very similar to that used by the Japanese. They are very fond of jewelry, and on all occasions wear a profusion of gold chains and rings. They are, both men and women, extremely cleanly, bathing usually twice a day, and their garments are of a snowy whiteness.

Their honesty is amazing; I can find no other adjective to express it. Their food consists chiefly of "tortillas" or cakes made of crushed corn. The corn is first boiled, then soaked in lye to soften the husk, then washed many times in water; it is then ground with water to a thick paste on stones called "metates," which are precisely like those used in ancient Egypt. From this paste are formed thin, circular cakes about six inches in diameter and one-eighth of an inch thick; these are heated through on an iron slab. With the "tortilla" they eat ground "chilis" or red peppers. They are quick to learn, and, with the abolishment of the peonage system, and a more liberal education and training, would be susceptible of enormous improvement. As it is they have produced statesmen, physicians, and lawyers, and can be found in every branch of industry. But these are due to extraneous causes, or rather to a partial abolishment in each case of the more prominent features of the peonage system. The offspring of the white and Maya races, no matter what be the degree of admixture of blood, are known as "Mestizos. In the making of a Mestizo there is a good Indian or a a good white man spoiled. They are pretty honest, very clean, but inclined to be impudent, excessively vain, sulky, and revengeful. The Mestizos are often surpassingly beautiful at first sight, but the impression fades on closer inspection. Both Indians and Mestizos, and of both sexes, are much given to intemperance.

ARCHÆOLOGY.

Scattered all over the two States of Yucatan and Campeche are found the ruins of large cities. These ruins were first brought prominently to the notice of the world by John L. Stephens, forty years ago. Since that time, with one or two prominent exceptions, these ruins have remained unvisited. Two of these cities, however, are now pretty well known to the world—Uxmal and Chichen Itzá. I have made several visits to Uxmal, and lately visited Chichen Itzà. I have also visited Aké on various occasions, and last June, accompanied by my wife and an

American gentleman interested in antiquities, visited Kabah, which had been unseen by foreigners since Stephens left it. On a subsequent occasion I revisited this place.

A report of this character, intended only to sketch out very roughly and broadly the main features of this country, its climate, customs, products, and commerce, will not permit any prolonged or minute description or discussion of these, the grandest ruins on the American continent. They consist of large buildings very solidly built of stone, elevated on one or more huge mounds or terraces, and covered usually with sculpture of a very peculiar character, all in very high relief. Hieroglyphs are few. Exquisitely worked statues are found from time to time; as, for example, the great statue found at Chichen Itzá by Dr. Le Plongeon, now in the Museo Nacional in Mexico. Discussion is rife as to the age of these structures; on the one hand a mighty antiquity is claimed for them, on the other it is asserted that they are not one thousand years old. The nearer we come to the latter conclusion, I think, the nearer do we approach the truth. Be their age what it may, one thing is certain, they are the relics of a high civilization which existed before the white man's arrival; they are the grandest and most satisfactory relics of that civilization. But the laborers are few; they are working under terrible disadvantages, and these noble ruins are fast perishing, carrying into oblivion the histories of the peoples who built them. Mexico has not the means to prosecute research among them; we, who are more interested therein than all others, leave the treasures of *American* archæology at our very doors and send our money and brains to swell the mighty army of searchers of Greek and Roman antiquities. But as I purpose making this subject the matter of a special dispatch, I shall say nothing more now on this subject.

CLIMATE.

There are two seasons in Yucatan, the wet and the dry. The extreme limits of the wet season may be stated as, commencement May 15, conclusion October 31. During November, December, and January occasional "northers" blow; in February, March, and April hot, dry weather prevails. The greatest heat in the house nearly passes 90° Fahr., and the lowest temperature in this consulate for the past two years was 62° Fahr. The State is in general healthy, although various fevers are not uncommon.

POLITICAL DIVISIONS.

The State of Yucatan is divided into sixteen districts—Merida, Izamal, Valladolid, Tizimin, Motul, Tixkokob, Temax, Acanceh, Tekax, Peto, Sotuta, Ticul, Espita, Maxcanu, Progreso, and Hunucmo. Its population is estimated at three hundred thousand, residing in seven cities, fourteen towns, one hundred and fifty-seven villages, one thousand three hundred and thirty-five "haciendas," four hundred and seventy-nine "ranchos," and five hundred and eighty-one residences. The capital city is Merida. Merida is situated about twenty-six miles inland; it covers about four square miles of ground, including its suburbs. It is well constructed, the houses chiefly of one story in height, built of stone. The streets are wide, and cross at right angles, running north and south and east and west. Public buildings are handsome edifices. The city is well lighted. Murders and burglaries are unknown. The police is good. There are a theater, four libraries, thirty-nine schools, including the university, fourteen churches, and the cathedral. The plazas are large, and one or two very beautiful.

The port is at Progreso. It cannot be fairly termed a port. Vessels have to anchor from 3 to 5 miles from the land. A Mexican engineer, who has been making soundings for a new wharf, informed me lately that to have a depth of 14 feet at low water at the end of a wharf, it would have to be over a mile long. The steamers, even when anchored 4 miles out, have rarely more than 2 feet of water under the keel.' The wharf in use at present is a wretched affair, and at high water barely permits lighters to come alongside.

The custom-house is a large, well-built stone edifice. Among the tables at the end of this report will be found a detailed statement of the industries carried on in each city and district.

RAILROADS.

Yucatan has experienced the general impulse of progress to-day, visible throughout Mexico, and this is well shown in the railroads. The road to Progreso is a broad-gauge, steel-track road, well built and equipped. As it is the pioneer road, and as competent engineers are rare, it is true trifling accidents and delays frequently occur, but experience will soon suggest the remedies. A new road is in process of construction to Progreso via Conkal, with a main branch to Valladolid, 150 miles to the east. The road, as far as Progreso, is expected to be finished within two years. The Peto Railroad has advanced over 30 miles to the south. As far as built, it is a first-class road and well managed. Its ultimate point is Peto, 125 miles south, with branches to Tekax and Ticul. Still another road is in construction to connect this city with Campeche. All the passenger cars are from Brill, of Philadelphia; the locomotives are English, and Baldwin. These last are giving entire satisfaction, while thus far the English engines have broken down and are not good or reliable. England, however, furnishes the rails at cheaper rates than can be got in the States. There is an opportunity here for American enterprise and capital.

LABOR.

There are about 21,000 peons on the various haciendas. These peons are nominally free, really slaves. The owner lends or advances money and in return the servant gives his work at a certain salary, part of which he receives and part of which is applied to the extinguishment of his indebtedness, but he never can entirely extinguish it. From time to time further advances are made, and as he is always in debt, so is he in continuous servitude. By nature improvident, he does not save, and could not if he would. The evils of this system are glaring, and to-day that Yucatan needs many willing hands to carry on work they cannot be had. Since I have been here, I have received many letters from men, artisans, men of all classes, asking my advice as to coming here. I have told them all, don't. We do need skilled workmen here, engineers, mechanics, carpenters, builders, and indeed in all the trades, but the man who wishes to come must be strong and healthy, must know the Spanish language, must have all his tools, and must have money. "How much?" At least enough to live on here for six months, and then to take him back to the United States if he fails. I have had too many poor unfortunates here, penniless, helpless, starving; and big as a consular heart may be, yet consular purses are not overloaded, and it were much better that those who are seeking work should first try every nook and

corner of our own broad land before thinking of coming to this or indeed any Hispano-American State.

COMMERCE.

Here it is that Yucatan has taken giant strides. In 1878 about 55,000 bales, averaging less than 400 pounds each, of henequen fiber were exported to all parts. In 1880 there were sent to the United States 85,434 bales, and to all other parts (chiefly to England and France) 11,917, a total of 97,351 bales. In 1881 there were sent to the United States 116,009 bales, to England and other points 23,424 bales; to this should be added, 3,000 bales which were burned in the fire at Progreso, referred to in my dispatch No. 37, making a total for the year of 143,433 bales. The value of the henequen fiber exported in 1880 is estimated at $1,805,848.18; of that exported in 1881 at $2,784,166.88. Naturally imports have in like proportion increased. The German and English follow the well tried and always successful plan of establishing large and reliable houses run by thoroughly competent capable men. True, many articles, as sheetings and muslins, hold their own, but there is no one here to push American goods. Sporadic agents appear with good samples, take good orders, and too often fill the orders with inferior goods. This plan will not do. There is no reason why we should not control the whole hardware business here, and especially the machinery business. Steam-engines, pumps, sugar-mills, fiber machinery, hydraulic presses, boilers, &c., are being ordered continually, but rarely is it from the United States. Yucatan is but one State, but what is done, or rather left undone here, is repeated all through. The American manufacturer is losing ground in these growing markets, which are so near us. One single company in the United States has tried the plan of establishing a permanent agent here, and already that house is reaping the benefits. I know what terrors the Mexican tariff has for our exporters, but in every case of loss the fault can be directly traced to carelessness or gross ignorance on the part of the exporter.

The State of Yucatan is a foreign purchaser to the extent of over $4,000,000 yearly. The greater part of this does not go to the United States. We buy the henequen fiber, the hides, deer skins, and hammocks, pay for them in money, and this money finds its outlets not in the States but in Europe. What is needed is careful study of what is wanted, energetic pushing of the goods, the establishment of a large, thoroughly reliable agency where first-class samples can always be seen, and above all promptitude and the greatest care and honesty in filling orders. The Mexican is suspicious and cautious. One invoice of goods inferior to those ordered and he cries off. The English and Germans on the other hand are more than careful. No detail escapes notice; packing is lightened, but it is secure; the taste of the market is catered to; mistakes rarely occur. But as I intend this only as an outline sketch, and propose writing especially on this topic, detailing what articles should be especially looked after, and the manner of securing this rapid trade, I shall close this hasty report, hoping it may attract the attention of our manufacturers to this very important market. I append some tabular statements which may prove of interest. I have collected these data with much difficulty, as scarcely any statistics are attainable, but they are very closely accurate.

LOUIS H. AYMÉ,
Consul.

UNITED STATES CONSULATE,
Merida, Yucatan, March 10, 1882.

TABLE No. 1.—*Showing the division of the State into districts, the number of cities, towns, villages, inhabitants, and schools in each, and the amount paid monthly for support of these last.*

Districts.	Cities and villages.		Population.		Schools.		Scholars.		Monthly support.	
	Cities and towns.	Villages, &c.	White.	Maya.	Male.	Female.	Male.	Female.	State.	Municipal.
Merida	10	91	29,543	13,382	18	11	653	391	.....	$1,001 00
Izamal	15	201	7,844	10,625	10	2	394	93	$249 00	5 00
Valladolid	25	144	4,303	11,365	10	2	249	96	342 00	24 00
Tizimin	14	129	4,344	4,562	5	1	255	74	144 00	5 00
Motul	12	293	6,651	14,639	12	2	457	127	237 00	40 00
Tixkokob	13	213	3,790	11,768	10	2	404	45	161 00	46 00
Temax	12	240	8,797	9,783	10	4	491	201	228 00	38 00
Acauceh	8	144	4,852	18,515	8	6	351	207	178 00	115 00
Tekax	12	125	6,696	6,699	11	2	710	147	255 00	8 00
Peto	4	48	2,798	2,381	7	3	232	122	153 00	10 00
Lotuka	15	80	3,188	5,185	8	2	321	58	185 00	15 00
Ticul	12	124	10,754	10,269	10	2	452	98	280 00	30 00
Espita	6	375	3,412	5,191	6	1	227	45	111 00	27 00
Maxcamé	7	120	5,731	12,926	5	3	225	132	149 00	30 00
Progreso	5	34	3,248	726	4	2	196	96	61 00	202 00
Hunucma	8	132	5,243	11,419	9	3	270	52	112 00	52 00
Totals	178	2,439	111,194	149,435	143	48	5,890	1,984	2,845 00	1,648 00

National Guard of the State, 12,294 men, 2,911 guns.

TABLE No. 2.—*Showing by districts the salt-works, haciendas, peons employed, cattle, horses, number of mecates planted in corn, beans, rice, tobacco, sugar, henequen, and juca, the motive engines, horse-power, and number of sugar mills and of henequen cleaning machines.*

Districts.	Salt-works.	Haciendas.	Peons.	Cattle.	Horses.	Number of mecates in—						Yuca.	Steam.	Machinery moved by—		Horse-power.	Sugar mills.	Cleaning machinery.	Henequen.
						Corn.	Beans.	Rice.	Tobacco.	Sugar.	Henequen.			Animals.	Wind-mills.				
Merida	.....	91	2,487	20,364	4,061	10,350	.....	.....	.....	.....	329,115	.....	76	.....	.....	454	.....	246	.....
Izamal	.....	201	1,625	16,612	1,515	13,690	150	.....	4	2,070	55,965	.....	36	.....	.....	164	12	58	.....
Valladolid	.....	144	972	3,153	1,204	11,040	.....	.....	.....	8,239	9,585	.....	7	.....	.....	26	56	9	.....
Tizimin	20	120	861	2,675	919	36,317	.....	.....	1,623	4,566	72	4,034	3	35	.....	105	34	.....	.....
Motul	135	293	1,071	20,172	5,064	73,595	.....	.....	.....	.....	50,106	.....	19	3	.....	90	.....	38	.....
Tixkokob	.....	213	1,788	14,704	3,344	1,000	.....	.....	.....	.....	129,422	.....	49	.....	.....	269	.....	102	.....
Temax	.....	240	1,421	16,871	1,861	.....	.....	.....	.....	.....	41,700	.....	17	.....	.....	91	.....	26	.....
Acanceh	.....	144	2,564	19,541	3,553	15,456	.....	.....	.....	.....	247,253	.....	66	.....	.....	463	.....	186	.....
Tekax	.....	125	1,365	4,485	1,059	22,238	80	.....	118	29,015	8,640	.....	17	194	.....	110	59	13	.....
Peto	.....	48	321	119	2	6,222	.....	.....	.....	3,392	80	.....	1	49	.....	50	50	.....	.....
Sotuta	.....	80	1,302	5,096	479	9,708	.....	.....	20	186	3,640	.....	4	3	.....	19	3	5	.....
Ticul	.....	124	517	19,994	3,057	89,673	816	.....	184	7,960	43,280	.....	31	1	.....	177	5	48	.....
Espita	.....	375	980	2,217	762	32,145	100	.....	30	7,478	275	.....	4	.....	.....	16	67	1	.....
Maxcanu	387	120	1,295	19,000	1,500	16,403	.....	40	.....	750	82,068	.....	27	4	.....	145	.....	66	.....
Progreso	11	34	162	905	70	3,522	.....	.....	100	.....	1,000	.....	1	1	1	6	1	2	.....
Hunucma	.....	132	2,036	20,384	2,489	16,430	.....	.....	.....	.....	127,229	.....	46	1	.....	256	.....	98	.....
Totals	553	2,493	20,767	186,282	30,974	357,698	1,146	40	2,079	63,656	1,129,429	4,034	404	291	1	2,441	287	899	.....

NOTE.—A "mecate" contains 576 square yards; about 9 mecates make 1 acre.

TABLE No. 3.—*Showing by districts the number of large houses of commerce of factories and of shops.*

Districts.	Commercial houses.							Factories.										Shops.																				
	Libraries.	Dry goods.	Groceries.	Hardware.	Glassware.	Commission.	Drugs.	Dyers.	Bakers.	Corks.	Weavers.	Ice.	Corn-mills.	Foundries.	Soap.	Distilleries.	Pastry.	Candles.	Shoes.	Ice cream.	Ebony goods.	Carpenter.	Blacksmith.	Silversmith.	Coopers.	Jewelry.	Wagon.	Saddle.	Barber.	Tailor.	Watch-maker.	Painters.	Sculptors.	Trunk.	Shell-workers.	Bookbindery.
Merida	4	30	157	14	2	7	10	11	22	8	2	2	10	1	5	6	....	7	76	4	....	88	59	32	4	15	9	19	4	37	7	..	5	16	4	2
Izamal	....	4	39	....	....	....	1	2	11	....	....	....	....	....	3	4	9	4	6	....	....	12	10	3	1	2	2	2	4	2	....	1	3	....	....	1
Valladolid	....	8	10	1	....	....	2	7	7	....	....	....	....	....	5	5	5	....	12	1	....	5	12	6	....	3	1	1	1	3	....	....	1	....	....	....
Tisimin	....	..	19	....	....	....	....	....	7	....	....	....	....	....	2	13	....	....	2	....	....	4	4	4	....	1	....	....	2	....	....	....	....	....	....	....
Motul	....	4	41	2	....	1	....	3	13	1	....	....	....	....	4	1	....	1	8	1	....	8	10	3	....	2	2	....	1	2	....	1	....	1	....	....
Tixkokob	....	4	42	....	....	1	....	....	5	....	....	1	....	....	....	....	....	3	4	....	....	6	..	4	....	....	1	....	1	1	....	....	1	....	....	....
Temax	....	..	27	....	....	....	....	1	7	....	....	....	....	....	..	....	....	....	..	....	....	6	4	4	....	1	....	....	..	1	....	....	1	....	....	....
Acanceh	....	3	24	....	....	....	....	....	6	....	....	....	....	....	....	3	....	....	3	....	....	8	5	3	....	....	....	....	3	1	....	1	....	....	....	....
Tekax	1	14	38	1	1	....	2	5	9	....	....	....	....	....	2	10	....	13	11	6	....	10	16	8	3	2	2	3	2	4	....	1	1	....	....	1
Peto	....	5	4	....	....	....	....	....	2	....	....	....	....	....	....	5	....	....	2	....	....	1	1	1	....	....	....	....	1	....	....	....	1	....	....	....
Sotuta	....	..	11	....	....	....	....	....	6	....	....	....	....	....	....	1	....	....	5	....	....	2	7	2	....	....	....	....	....	....	....	....	....	....	....	....
Ticul	....	1	30	....	....	....	1	....	23	....	....	....	....	....	2	2	3	....	9	....	....	12	9	5	....	3	....	....	1	2	....	....	1	....	....	....
Espita	....	12	14	....	....	....	....	1	10	....	....	....	....	....	....	9	3	....	4	....	....	5	6	4	....	2	1	1	4	3	....	....	3	....	....	....
Maxcanu	....	7	44	....	....	....	....	4	16	....	....	....	....	....	4	2	8	1	4	....	....	7	7	2	....	....	....	1	3	3	....	1	1	....	....	....
Progreso	1	2	20	....	....	6	....	....	7	....	....	1	....	....	....	1	....	....	4	1	....	6	3	2	....	1	....	....	3	2	....	....	....	....	....	....
Hunucma	....	1	36	....	....	....	....	14	2	....	....	....	1	....	....	....	....	3	7	....	1	9	7	4	....	2	2	2	5	1	....	1	1	....	....	....
Totals	6	95	556	19	3	15	16	48	153	9	2	4	11	1	27	62	28	22	157	13	1	189	160	87	8	34	20	29	35	62	7	6	19	17	4	4

THE ISLAND OF RÉUNION—ITS HISTORY, GEOGRAPHY, AND COMMERCE.

REPORT BY COMMERCIAL AGENT LANGLOIS, OF ST. DENIS.

DISCOVERY, GEOGRAPHY, AND HISTORY.

The island of Réunion is situated in the Indian Ocean at about 400 miles east of Madagascar, and somewhat 100 miles to the southwest of the island of Mauritius.

Discovered in 1513 by the Portuguese Don Pedro Mascarenhas, the island was named Mascareignes, and forms part of a group known under the appellation of "Archipel des Mascareignes." Its capital, St. Denis, to the northward of the island, is situated in latitude south 20° 51′ 43″, and longitude east 53° 9′ 52″. St. Pierre, the second capital, in the south, is in latitude 21° 19′ 30″ south, and in longitude 53° 11′ 30″ east.

In 1642, the island was taken by the French and preserved its name of Mascareignes until 1649, at which period it assumed the name of "Ile Bourbon," which remained undisturbed up to the year 1794. From the 12th of April, 1794, up to the 8th of July, 1810, the island assumed successively the names of "Ile de la Réunion" and "Ile Bonaparte."

On July 8, 1810, a capitulation was signed with the British besieging forces, by which the island was relinquished to the victors; and on the 9th it reassumed the name of Ile Bourbon. On the 6th of April, 1815, the island was retroceded by England to France, and preserved its name until 1848,* at which period it once more took the name of "Ile de la Réunion," by which it is designated up to the present time.

Administered by governors or commandants placed under the immediate control and supervision of the governors-general residing at the island of Mauritius, the two islands, from 1735 to 1819, say for a period of 75 years, were united by the same ties and the same aspirations, deserving to be designated as the "Sister Islands," so closely allied by the habits, customs, and religion of their inhabitants; moreover, being protected by the same flag, speaking the same language, and subjected alike to the revolutionary shocks, and to the political changes that occurred in Europe and which were felt by the mother country. And a feature worthy of remark is, that, notwithstanding the 66 years which mark the separation or severance of the two islands—the one being protected by the tricolor and the other by the British standard—the bonds which formerly united the first inhabitants, the pioneers, as it were, of those islands, at the time of their occupation, have continued uninterrupted, or rather have grown nowadays more close, and bid fair to become still more so among their descendants.

AREA, MOUNTAINS, RIVERS, AND VOLCANO.

The island of Réunion, which comprises altogether an area of about 291,900 hectares, is of an elliptical form, the great axis of which, of a length of 71 kilometers, is directed from the northwest to the southeast, and inclosed by a chain of mountains which separate the island into two parts—the windward and leeward districts. The island seems to have

* On the 20th of December, 1848, the abolition of slavery was decreed.

been entirely formed out of volcanic convulsions.* Generally speaking, it is inhabited only on the outskirts, on the sea coast, and, it is stated, that the extent of land cultivated does not exceed ten kilometers in breadth. This is explained by the fact that the island is traversed in all directions by high mountains separated by deep ravines or chasms; in the interior, the appearance of the island presents but the image of an immense cataclysm, a chaos, from which emerges a few plains and flat lands, susceptible only of being turned to account by cultivators of vegetables and cereals. These lands are rather difficult of access, and those who resort to those means of cultivation derive from their hard labors but a very meager compensation.

The towering and snow-capped peak of the island, "Le Piton des Neiges," an old crater, which, like the crater Bory,† forms part of the southeastern block of the chain of mountains which separates the island into two parts, has an altitude of 3,069 meters.‡ The crater "Bory," which is in close proximity to the burning crater (altitude 2,528 meters), is at an altitude of 2,625 meters. An eruption of the volcano took place in the month of August last year, with a running of lava that continued for several days. These eruptions are not of frequent occurrence. Several shocks of earthquake have also been felt here since the island was discovered, up to date, fortunately without any harm to the colony and its inhabitants.

The other principal mountains are:

1. The "Grand Bénard," altitude 2,892 meters.
2. The "Morne Langevin," altitude 2,391 meters.
3. The "Cimandef," altitude 2,226 meters.

The island comprises numerous watercourses or rivers, the greater number of which are very much hemmed in. Some of these, almost dry during the cold season, are transformed into impetuous torrents of a breadth of almost one kilometer, during the rainy season and the prevalence of hurricanes. These rivers then carry, in their disorderly and irrepressible course, stupendous blocks of granite and solid stone, the swelling of the waters intercepting at the same time all communication between the districts for several days.

CLIMATE.

In former days the climate of the island, like that of Mauritius, was justly reputed for its incomparable salubrity. But those good times are now far away from us. Some fifteen years ago, however, the island left but very little to be desired as regards its sanitary condition; and if, nowadays, it be correct to say that the island still offers to its inhabitants and to the strangers who visit it climates with different temperatures and which best suit them, it is also unfortunately but too true to remark that, for the last ten years especially, this renowned and well-deserved reputation of salubrity has disappeared under the influence of epidemics of paludal fever, the so-called "Mauritius fever,"

*Opinion of Bory St. Vincent, learned geologist, born at Agen in 1780, died in the year 1846. Bory St. Vincent visited the islands of Réunion and of Mauritius at the beginning of this century.

†This crater bears the name of Bory St. Vincent, who visited it at the beginning of this century.

‡Those altitudes are extracted from the "Annuaire de l'Ile de la Réunion," published in 1881, to which I am also largely indebted for the historical data and other information embodied in this report.

against the morbid and deadly effects of which the inhabitants are continually struggling.

However, it affords much pleasure to state that this dreadful disease, from which the districts of the island are not exempt, has not yet made its appearance among the plains and the flat lands of the high regions. The inhabitants of Réunion, those of Mauritius and Seychelles, the creoles of the Sister Islands who have settled in Madagascar and in the French possessions of Ste. Marie of Madagascar, Mayotte, and Nossi-bé, repair thither, seeking the restoration of their health, to prepare once more for the struggle for life. Of these places, or sanitarium, the most frequented are the mineral sources of:

1. Salazie,* at a distance of 54 kilometers from St. Denis; altitude, 872 meters. Here is to be found a mineral source with a temperature of 32°, supplying from 900 to 1,000 liters of water per 24 hours, the waters containing bicarbonate of soda, and are also slightly carbonated. This station comprises a military hospital, with a surgeon attached to it, and numerous comfortable dwelling houses and villas, and is the most resorted to by invalids and tourists; this source, like all the others, is under the control of government.

2. "Cilaos," distant from St. Denis 132 kilometers; altitude, 1,114 meters; temperature of waters, 36°. The waters of the source are, chemically, much like to those of Salazie; there is also a source of cold mineral water in the locality, the analysis of which has revealed the same composition as that of the warm source.

3. "Mafate," distance from St. Denis about 60 kilometers; altitude, 682 meters; temperature of waters, 31°; supply, 900 liters per 24 hours. There exists in the same localities various other springs which are not visited by travelers and invalids as watering places. Some of these, among others, present certain remarkable peculiarities; there are some at "Cilaos" and "Salazie" which contain petrifying properties;† at Mafate and Cilaos, whose waters contain magnesia, and which produce the affection known under the name of "goiter" in all those who make use of these waters. Needless to remark that all these thermal sources are within range of the volcano.

4. The Brulé, and—

5. St. François,‡ two lofty hills, in close proximity to and forming a part of the commune or district of St. Denis, are situate at an altitude of 600 to 700 meters and offer both to the inhabitants of St. Denis, civil and military, and the strangers a most salubrious and invigorating climate. Here there are no thermal sources.§

To reach these different stations, the mode of transport resorted to nowadays consists of saddle-horses, hackney coaches, and omnibuses. This does not, however, apply to "Mafate" and "Cilaos," which places are reached in "chaises á porteur," or "palanquins," which are carried by four men (Africans); the first part of the journey, midway, having been performed by means of the conveyances above mentioned.

* Subdistricts to and forms part of St. Andre. Superficial area, 11,000 hectares; population, 5,373 souls.

† It is stated that one of these sources at Salazie, was entirely destroyed by a landslip which occurred at the place called "Gros-Morne" on November 26, 1875, with considerable loss of life and property.

‡ Two years ago belonging to the commune of St. Denis and the governor's country residence; now private property.

§ We should also include in the above list the "*Plaine des Palmistes*;" area, 50,000 hectares; altitude, 1,000 to 1,200 meters; population, 1,480 souls.

OFFICIAL ANALYSES OF THE MINERAL SOURCES OF SALAZIE, CILAOS, AND MAFATE.

SALAZIE.

	Gr.
Bicarbonate of soda	0.535
Bicarbonate of magnesia	0.364
Bicarbonate of lime	0.180
Bicarbonate of iron	0.025
Hydrochlorate of soda	0.029
Sulphate of soda	0.017
Silica	0.200
Loss	0.000
Total	1.350

One liter of the same mineral waters at 32° of temperature contains—

	Gr.
Carbonic acid (free)	0.877.530
Bicarbonate of soda	0.535.517.40
Bicarbonate of potash	0.056.368.22
Bicarbonate of magnesia	0.364.95
Bicarbonate of lime	0.18
Bicarbonate of iron	0.25
Chlorate of sodium	0.029.0465
Sulphate of soda	0.017.13
Silica	0.200
Organic matters	0.074

CILAOS.

Cold source.

One liter of water contains—

	Gr.
Soda	0.163.373
Potash	0.050.605
Lime	0.104.140
Magnesia	0.073.000
Silica	0.147.000
Oxide of iron	0.009.878
Chloride	0.003.467
Acidity	0.030.247
Carbonic acid	0.273.720
Organic matters	0.183.000
Loss	0.002.107
Fixed principles	1.0505

Hot source.

Bicarbonate of soda	0.553.640
Bicarbonate of potash	0.123.382
Bicarbonate of magnesia	0.218.783
Bicarbonate of lime	0.308.972
Bicarbonate of iron	0.034.462
Sulphate of soda	0.082.513
Chlorate of sodium	0.006.859
Silica	0.140.600
Organic matters	0.185.000
Carbonic acid (free)	4.506.475
Iodure	Traces.
Fluor	Traces.
Alumina	Traces.
Phosphoric acid	Traces.
Manganese	Traces.

Temperature 38°.

MAFATE.

One liter contains—

	Gr.
Sulphide of sodium	0.005.760.78
Sulphide of iron	0.001.100.00
Sulphide of manganese	0.002.200.00
Chloride of sodium	0.075.100.00
Sulphate of soda	0.023.526.00
Carbonate of soda	0.050.600.00
Phosphate of soda	0.002.232.00
Silicate of soda	0.012.575.20
Silicate of potash	0.019.063.60
Silicate of alumina	0.008.038.00
Silicate of magnesia	0.001.438.00
Organic matters	0.062.300.00
Iodure	Traces.
Fluor	Traces.
Copper	Traces.

DIVISIONS.

I have already explained, at the beginning of Chapter II, that the island was separated into two parts, the "windward" and "leeward" districts.

The windward part comprises or consists of six "communes," or districts, namely:

1. St. Denis.
2. Ste. Marie.
3. Ste. Suzanne.
4. St. André.
5. St. Benoit.
6. Ste. Rose.

The leeward part also consists of six communes, or districts, viz:

1. St. Paul.
2. St. Leu.
3. St. Louis.
4. St. Pierre.
5. St. Joseph.
6. St. Philippe.

St. Denis, the capital* and the seat of the government, occupies a superficial area of 15,000 hectares. The general population, (including military) by return of the last census, published November, 1881, amounts to 30,835. The town of St. Denis, built in the form of an amphitheater, with its regularly traced streets, its mansions, gardens, and public edifices, presents a most charming appearance and affords a comfortable residence to the stranger who lands on its shores. Its inhabitants are kind, generous, and hospitable, like those of the other "communes." The French language is exclusively used all throughout the Island; and, with the exception of about a dozen of persons speaking or writing a little English, this language is entirely neglected, although the first elements are taught at the "Lyceum."

The town is abundantly supplied with pure and excellent water, and less misgivings would be entertained as to its salubrity, even in the estimation of its inhabitants, if the laws enacted for the protection of its sanitary condition were more strictly observed. Its population, like that of the other "communes" or districts, and as is the case generally in the colonies, is composed of heterogeneous elements: First

* St. Denis was declared the capital of the island September 30, 1738.

of all, of the inhabitants proper, or natives of the soil, the descendants of the French settlers, second, the descendants of the old slave population; third, of the French citizens who have emigrated to and entered into various pursuits; and finally, of a few foreigners, of Africans, Chinese, and Indian immigrants and settlers from British India and the French possessions of the Coromandel coast.

The only two reefs that exist along the coast of Réunion are those known under the names of "Cousin" and "Marianne," in the district of Ste. Suzanne, windward of the island, and the existence of which is indicated to mariners by the "Belair" light-house.

The harbor of St. Denis, which is nothing but an open roadstead, is the most frequented of all those of the island, and the reason is obvious. It is at St. Denis that, irrespective of the government departments, are to be found the banks and credit establishments, the counting houses, the warehouses, insurance companies, &c.; in one word here is centered the general movement of business. The imports especially are almost exclusively centralized at this port, and are afterwards directed hence towards the other communes or districts of the windward and leeward parts of the island. The "Bay du Butor," situate at about 2 kilometers distance from St. Denis, affords to shipping that anchor there the same means of embarkation and disembarkation, besides as good a security against maritime risk, as St. Denis itself.

I have to add that are to be found within the limits of St. Denis three sugar estates and nine distilleries for the manufacture of rum from sirups and treacle.

St. Pierre, the second capital of the island, and which, together with St. Philippe, St. Joseph, St. Louis, St. Leu, and St. Paul, forms part of the so-called leeward communes of the colony, is pronounced to be the richest district in the entire island. Its superficial area is 36,500 hectares, and its population, according to the late census, numbered 27,748 souls. Like St. Denis, it is abundantly supplied with pure and excellent water, and is subjected also to the effects of malaria.

Exposed to the effects of the trade-winds, its harbor, or rather its open roadstead, is dangerous to vessels lying at anchor. Very few vessels go there, and only when needed. Some twenty-five years ago* certain works were begun with the view of constructing a safe harbor in that locality. Those works, which have been abandoned for several years, are soon to be resumed. By a decree, of September 24, 1880, the commune of St. Pierre has been authorized to contracta loan of 1,500,000 francs for the completion of the harbor, which then will be able to give shelter, exclusive of colonial vessels and coasters, to five or six vessels. This loan was negotiated in France in the course of last year, and the necessary implements for the prosecution of the works are daily expected.

In the commune of St. Pierre there are ten sugar estates and five distilleries for the manufacture of rum.

Of the other windward "communes" or "districts" where shipping call, the roadsteads of Ste. Marie and Ste. Suzanne afford more security than those of St. André (Champ-Borne and Bois-Rouge), St. Benoit, and Ste. Rose. These latter are usually dangerous to shipping, owing to the strong easterly and southeasterly winds blowing in those quarters (especially from the month of May to the month of October, inclusively), and the sea, which runs very high. From these causes vessels are compelled to put to sea, sometimes with loss of anchors and chain

* The laying of the first stone took place on March 12, 1854.

to avoid a lee shore; and the shipment and discharging of goods are not only difficult, but occasion great loss of time, if not of life and property.

Of the open roadsteads comprised in the leeward direction: St. Pierre (already mentioned), St. Leu and St. Paul, and including those to windward. St. Paul is undoubtedly the best and the safest of all the others of the whole island.

The Bay of St. Paul is splendid, the sea being almost always smooth and calm. It could afford shelter to a good many vessels; but very few, however, go thither, owing to the little inducement which that "commune" in times gone by, the capital of the island, offers to trade. It is expected, however, that St. Paul, which is interesting in more than one feature, will recover part of its past prestige when the island will have the railway now very nearly completed, also with the harbor now in course of construction at the "Pointe des Gallets," the works of which undertaking are being pushed forward with prodigious activity. St. Paul has a superficial area of 35,000 hectares, contains 10 sugar estates, 7 distilleries, and has a population of 28,685 souls. It possesses fine barracks and the oldest church of the island.

As for the other "communes" I confine my observations to the simple reproduction of the number of hectares of which each of them individually consists, the number of their inhabitants, &c., as will be gathered from the annexed tabular statement, which equally comprises the total recapitulation of the area of land, population, sugar estates, and distilleries of all the communes above named.

Statement showing the number of hectares of which each of the communes or districts and subdistricts of the island individually consists; also the number of their inhabitants, general population, sugar estates, and distilleries.

Communes or districts.	Subdistricts.	Superficial area in hectares.	No. of sugar estates.	No. of distilleries.	General population.
St. Denis	The Brulé and St. François	15,000	3	9	30,835
Ste. Marie		2,500	5	2	5,933
Ste. Suzanne		5,600	4	2	6,407
St. André	Salazie	16,600	3	1	14,458
St. Benoit		36,600	7	3	12,942
	Plaine des Palmistes	50,000	...	.....	1,480
Ste. Rose		18,000	2	2	3,141
St Philippe		15,400	1	1	2,460
St. Joseph		19,000	2	.....	9,372
St. Pierre		36,500	8	5	27,748
St. Louis		21,400	3	4	17,344
St. Leu		20,000	5	2	8,688
St. Paul	St. Silles, Possession, and Pointe des Gallets	35,300	10	7	20,685
Total		291,900	53	38	169,493

REMARKS.

General population, 169,493, including about 800 military of all ranks, marine infantry, marine artillery, engineers, and gendarmes, is composed as follows:

Natives of the soil, Europeans, and military	122,658
Indians	30,634
Malagasy (natives of Madagascar)	6,370
Africans	9,313
Chinese	518
Total	169,493

Population as per official returns:

In 1877	180,295
In 1878	178,310
In 1879	176,648

METEOROLOGY.

The year is divided into two seasons, summer and winter. The hot season begins in November and ends in April, during which heavy rains set in, with thunder occasionally. The cold season lasts from May to October, when the trade-winds from the southeast blow almost uninterruptedly. The leeward part of the island is then generally dry, whereas the southeast region, *i. e.*, from St. Philippe to St. Benoit, is often visited with showers.

Hurricanes are looked upon, and justly so, as one of the greatest calamities that may befall the colony, and both Mauritius and Réunion are periodically visited by those meteors between the months of January and March, the effects of which are usually felt in Mauritius about thirty-six hours before they manifest themselves in this island.

Towards the end of last year the home government accepted a scheme submitted by the honorable Mr. Bridet* having for its object to unite the two islands by means of a submarine cable that would, among other advantages to be derived therefrom, enable prompt warning to be given to Réunion of the atmospheric perturbations occurring in Mauritius, and which have but too frequently caused great destruction of life, and have inflicted such heavy losses both on ship-owners and insurance companies having intercourse with those islands.

From October to May may be observed the phenomenon called "raz de marée," which causes the sea to rise considerably, beating with great violence all along the coast.

COLONIAL ADMINISTRATION.

The colonial administration consists actually of a governor, commissaire général de la marine, an ordonnateur,† also a "commissaire général de la marine," a "director of the interior," who manages the whole of the internal business, and lastly of a procureur-général, who discharges the duties of minister of justice.

There is a privy council to deal with all administrative questions, and the conseil-général votes the budget and enacts the colonial laws, irrespective of all orders and decrees that emanate from the head of the colony, with the consent and advice of the privy council.

The administration of justice consists—

1. Of a court of appeal.
2. Of a court of first instance.
3. Of a justice of the peace.‡

The first of these comprises a president, a vice-president, and seven judges, or "conseillers." The admiralty jurisdiction belongs to the court of first instance with a right of appeal.

The criminal affairs of the island are under the immediate control of the procureur-général, with the assistance of two substitutes. The crimes and felonies are prosecuted before the assize court with a jury, and the misdemeanors before the court of first instance, the prosecutors being the "procureur de la république" and two substitutes.

Appeals are allowed from the assize court and court of appeal to the

* A retired post-captain of the French navy, late post-captain, Réunion, manager of the bank of Réunion, the well-known author of a most interesting book, the "Science of Cyclonomy."

† His duties are to supervise the finances of the land and sea forces of the administration of justice and of the clergy. In case of necessity, he replaces the governor.

‡ These three courts hold their sittings in St. Denis.

court of cassation in France, and from judgments of the court of first instance to the cour d'appel in the colony.

Each commune of the island possesses a municipality, the councillors being named by election, and the mayors by the governor.

The duties that devolve upon those institutions are those common to municipalities, *i. e.*, repairs and lighting of streets, scavengering, keeping of fire-brigades, &c., each district having its own budget.

The "budget" for the whole island for the year 1881, as published in the *Annuaire de la Réunion*, already quoted, including the expenditure for the local administration, amounted to 6,866,272 (say six million eight hundred and sixty-six thousand and two hundred and seventy-two) francs, out of which 1,916,143 are contributed by the home government towards the "colonial service," and the balance, 4,950,129, is paid on account of local expenses out of the revenues of the colony. During the year 1881 there was a surplus of receipts (local) over expenditure (local) of 71,752 francs.

ECCLESIASTICAL.

The clergy, which belong exclusively to the Roman Catholic faith, have for their head a bishop, who is assisted by two vicars-general and a number of priests, who perform their ecclesiastical duties at the cathedral, and in many other churches in St. Denis. It is needless to remark that the population (exclusive of the Indians, Africans, Malagasy, and Chinese) is of the Roman Catholic persuasion, with the exception of about one hundred Protestants.

Each of the communes is provided with a number of curates and vicars in proportion to their respective population.

EDUCATIONAL.

The principal educational establishment of the colony is the "Lycée de St. Denis," which numbered, end of 1880, 500 pupils, including boarders and day pupils. The course of studies comprises classics, literature, mathematics, physics, chemistry, natural history, sciences, rhetoric, history and geography, agronomy, legislation, drawing (in all its branches), bookkeeping, vocal music, fencing, and gymnastics. The elements of the English and German languages are also taught here.

The establishment is conducted by a rector, a censor, and fifty-seven professors and masters; those intrusted with the higher classes having taken their degrees at the universities in France.

Education of a secondary character is imparted in eight colleges, comprising 840 pupils. Four of these colleges are public; two are free, but receive an aid from the state, the other being entirely free.

There are three communal colleges in the district, one at St. Benoit, one at St. André, and the last at St. Paul; there is a grant-in-aid school at St. Pierre and one at St. Louis.

The total number of "alumni" frequenting the schools all over the island was, in 1880, 12,200, of which 5,642 were girls. There were 157 educational establishments under the control of government, 110 public and grant-in-aid schools, and 47 private seminaries. The return for the year 1881 has not yet been published, but it is notorious that the number of pupils, both males and females, has considerably increased.

The public instruction both of the city and of the communes costs the government about one million of francs, which sum is expended among 450 professors, teachers, and masters throughout the whole island.

AGRICULTURE.

Of the entire superficial area of the island, which the partial enumeration of each commune brings up to a total of 291,900 hectares, whilst from other sources that surface is fixed at 260,000 hectares, no plausible explanation of such difference being put forth, it would appear that 150,000 hectares only are susceptible of being cultivated. No doubt this latter term comprises alike the land available both for agricultural purposes, properly speaking, and for the cultivation of minor produce in the highlands as well as in the lower regions of the island, and if, advisedly, I make use of the words "no doubt," it is because I am not in presence of any reliable data in this respect, my personal researches in that direction having proved fruitless, no statistics of this nature being extant, as far, at least, as I have been able to ascertain. It is as well that I should add that the short space of time which has elapsed since I have assumed the duties of the post to which the Government of the United States has done me the honor of appointing me, up to the moment of the preparation of this report to the Department of State, together with the very limited means at my disposal, has hardly enabled me to find sufficient leisure to place myself in communication with many persons who, otherwise, might have been in a position to afford me such information as would have permitted me to have drawn up statistics of my own, of a satisfactory character. This "lacune," which I deeply regret should exist in this circumstance, I shall endeavor to make up for in my next report to the Department. *

But to return. Just as is the case with Mauritius, agriculture in this quarter is subjected to numerous vicissitudes. Without taking into account the hurricanes that periodically pass over those two islands, and cause such havoc among their plantations, one must not lose sight of droughts, cane disease, &c. As in Mauritius also, agriculture depends on Indian immigration, the laborers employed to cultivate the estates being chiefly Indian immigrants. Their introduction into Réunion coincides with the abolition of slavery—1848; and but very recently, 3d May, 1881, a decree emanating from the local government promulgated in the colony two decrees under the hand of the President of the French Republic, dated March 30, 1881, having reference first, to the convention entered into between the French and British Governments on July 1, 1881, for the purpose of regulating the recruiting and the treatment of Indians introduced in the French colonies (Réunion, Martinique, and Guadeloupe) from British India;" and, second, to the "appointment of a protector of immigrants in this island."

I have remarked above that the superficial area or extent of land susceptible of cultivation is 150,000 hectares. The main and principal culture consists of the sugar cane. Next in importance come the coffee plant, vanilla, and cloves, all of which are articles of exportation. The minor culture comprises principally, as articles of export also, potatoes and a large variety of beans of excellent quality, which find an easy sale in the marts of the sister island, Mauritius.

It may be said, without fear of contradiction, that the cultivation of the sugar cane and its manipulation are, in Réunion, far behind the system followed and the results obtained in Mauritius; whilst the finest sugars of all the sugar-producing colonies in the world are the "apan-

*I make the same reservation as regards the insufficiency of the statistics on the imports and exports of the island; in one word, on the present commercial relations of the island with the outer world.

age" of Mauritius, which rank first among them. It is also beyond question that Réunion, with the exception of some slight improvements introduced in the manufacture, especially of the white sorts for local consumption, has remained stationary as regards its culture and the manipulation of the qualities of sugar fit for exportation.*

Regard must be had, however, first, to the difficulties which sugar producers in Réunion have to contend against in reference to the cultivation of their lands, and, second, to the little inducement offered and the limited sphere for the disposal of its produce, which has hitherto been confined to the French European markets with but very few exceptions. However, there is every reason to hope that ere long the cultivation of the sugar-cane will be ameliorated, and that its manipulation will attain such a degree of perfection that the superior types will find a ready and advantageous sale both in the Indian and Australian markets, thus affording a compensation for the restricted production of this colony.

There are in the island several establishments for the manufacture of manure, both natural and chemical, which is used for agricultural purposes; the imports of similar articles being extremely limited, and very little guano being employed by the planters. There exists also an "agronomical station" (station agronomique) under the control of the government, for the analysis of land. manure, sugar, and other articles susceptible of being analyzed. Unlike the system followed in Mauritius, of disposing of sugar according to the Dutch type or standard, the custom here is to value that produce according to its saccharine richness and polarization; hence the necessity for analyzing the same.

A commission of French engineers, who arrived in the island some three months since, at once proceeded to a series of hydrographic experiments, with a view of ascertaining whether it would be possible to treasure up the immense quantities of water flowing from the rivers, and which are now lost, by means of water-sheds or otherwise, so that they might be utilized for the benefit of those communes which are less favored in this respect by nature, and for agricultural purposes. It is rumored that, in the event the report of this commission be favorable to the carrying out of the contemplated scheme, a company which formed in France will at once come forward and undertake the work, the immediate results of which would be an immense advantage for the colony at large, in every respect. The success of the project would insure work to the poorer classes, as is the case with regard to the railway construction; would prove also of immense benefit both to agriculture and commerce.

I annex (1) tabular statement of the exports of sugar from 1860 to 1880, inclusive,† with average value for the last ten years only (annex marked C), and (2) tabular statement of vanilla produced and exported from 1872 to May 31, 1881, with gross value declared at customs (annex marked D).

As regards coffee and cloves, I regret to be unable to supply any statistics in respect to exports, the average value of those articles being respectively from 70 f. to 110 f. per 50 kilos of coffee, according to marks and quality, and 2 f. to 2.50 f. per kilo of cloves.

*An intercolonial exhibition took place in October last, 1881, at Réunion and Mauritius, on which occasion, however, some fine specimens of Réunion sugars were exhibited.

†*I. e.*, crops 1859–'60 to 1880–'81, July 31.

C.—*Statement of exports of sugar from* 1860 *to* 1880, 1881, *inclusive, with values of same for the last ten years only.*

Crop produced, 1859 to 1860, 68,469,081 kilograms.

	Kilograms.
1860 to 1861	61,961,697
1861 to 1862	61,564,111
1862 to 1863	47,800,763
1863 to 1864	40,190,289
1864 to 1865	44,876,958
1865 to 1866	48,401,053
1866 to 1867	36,000,440
1867 to 1868	39,732,507
1868 to 1869	40,712,075
1869 to 1870	20,216,827
1870 to 1871	28,401,395

Years.	Quantity.	Average value per 50 kilos.
	Kilograms.	*Francs.*
1871 to 1872	39,084,997	23
1872 to 1873	25,644,520	25.50
1873 to 1874	38,944,128	23
1874 to 1875	32,176,135	22.50
1875 to 1876	35,449,650	20
1876 to 1877	34,412,957	30
1877 to 1878	40,380,000	23
1878 to 1879	24,640,265	22.50
1879 to 1880	20,815,321	22.50
1880 to 1881	27,373,401	21.50

D.—*Statement of exports of vanilla from* 1872 *to June* 1, 1881, *inclusive, with declared values at customs of same.*

Years.	Exports.	Values.
	Kilograms.	*Francs.*
1872	12,305	220,854
1873	10,063	1,257,752
1874	20,982	1,810,154
1875	21,698	1,875,783
1876	27,761	1,669,269
1877	30,146	940,696
1878	24,730	820,857
1879	43,629	1,604,308
1880	19,241	436,408
June 1, 1881	11,427	503,016

COMMERCE AND SHIPPING.

The commercial intercourse of Réunion with foreign countries was always, and is still, of a very limited character. However, it is proper to remark that some improvement has taken place of late on this score. As a producing colony, the sugar manipulated would be barely sufficient to supply either the market of Bombay or those of the Australian ports. Indeed, it only requires a glance at the tabular statement of its production, especially during the last ten years, to be convinced of the limited figure to which it has fallen; and when it is borne in mind that the consumption of Bombay and the several Australian marts exceeds 85,000,000 kilograms of the sugar manufactured in Mauritius only,* it is quite evident that there is room for the foregoing observations. On

* Return of crop, July 31, 1880–'81; Bombay, 39,082,682 kilograms; Australian ports, including New Zealand, 46,338,406 kilograms; total, 85,421,088 kilograms.

the other hand, the production of vanilla is considerable. But this article, notwithstanding its incontestable value, is insufficient to furnish any appreciable element for the furtherance of shipping interests. The exportation of this produce, moreover, takes place by means of the steamers which ply between Aden, Réunion, and Mauritius.

FRENCH MAIL STEAMERS ("MESSAGERIES MARITIMES").

Table fixing the departures and arrivals of the mail steamers for the year 1882.

Departures from Marseilles.	Departures from Aden.	Arrivals at and departures from—		Arrivals at Port Louis, Mauritius.	Departures from Port Louis, Mauritius.	Arrivals at and departures from—		Arrivals at Aden.	Arrivals at Marseilles.
		Mahé, Seychelles.	St. Denis, Réunion.			St. Denis, Réunion.	Mahé, Seychelles.		
Sunday.	*Sunday.*	*Sunday.*	*Friday.*	*Saturday.*	*Tuesday.*	*Wednes'y.*	*Monday.*	*Monday.*	*Monday.*
Jan. 8	Jan. 22	Jan. 29	Feb. 3	Feb. 4	Jan. 24	Jan. 25	Jan. 30	Feb. 6	Feb. 20.
Feb. 5	Feb. 19	Feb. 26	Mar. 3	Mar. 4	Feb. 21	Feb. 22	Feb. 27	Mar. 6	Mar. 20
Mar. 5	Mar. 19	Mar. 26	Mar. 31	Apr. 1	Mar. 21	Mar. 22	Mar. 27	Apr. 3	Apr. 17
Apr. 2	Apr. 16	Apr. 23	Apr. 28	Apr. 29	Apr. 18	Apr. 19	Apr. 24	May 1	May 15
Apr. 30	May 14	May 21	May 26	May 27	May 16	May 17	May 22	May 29	June 12
May 28	June 11	June 18	June 23	June 24	June 13	June 14	June 19	June 26	July 10
June 25	July 9	July 16	July 21	July 22	July 11	July 12	July 17	July 24	Aug. 7
July 23	Aug. 6	Aug. 13	Aug. 18	Aug. 19	Aug. 8	Aug. 9	Aug. 14	Aug. 21	Sept. 4
Aug. 20	Sept. 3	Sept. 10	Sept. 15	Sept. 16	Sept. 5	Sept. 6	Sept. 11	Sept. 18	Oct. 2
Sept. 17	Oct. 1	Oct. 8	Oct. 13	Oct. 14	Oct. 3	Oct. 4	Oct. 9	Oct. 16	Oct. 30
Oct. 15	Oct. 29	Nov. 5	Nov. 10	Nov. 11	Oct. 31	Nov. 1	Nov. 6	Nov. 13	Nov. 27
Nov. 12	Nov. 26	Dec. 3	Dec. 8	Dec. 9	Nov. 28	Nov. 29	Dec. 4	Dec. 11	Dec. 25
Dec. 10	Dec. 24	Dec. 31	Jan. 5*	Jan. 6*	Dec. 26	Dec. 27	Jan. 1*	Jan. 8*	Jan. 22*

*1883.

As regards coffee, and particularly cloves, their production is still more limited, and can only be looked upon as an auxiliary to the main production, sugar. It follows from what precedes that the produce of the island fit for exportation, and susceptible of forming materials for the requirement of sailing vessels, would not exceed 45,000 tons; but it is proper to remark that this figure would be increased to a certain extent, say about 5,000 tons, by taking into account the export part of goods imported into this colony from France and foreign ports, which find their way when occasion offers to the Mauritius market, and this accounts partly for the commercial intercourse existing between Réunion and Mauritius, and *vice versa.*

There are no less than 38 distilleries all throughout the island, and the distillation of the sirups and treacle is carried on on a large scale, coupled with much care. The rum which is thus made is of excellent quality, and is used for local consumption. It is the local liquor, which is the favorite drink both of rich and poor, high or low. The duty which is levied on that article (2.35 francs per liter of pure alcohol) forms a most important item in the internal revenues.*

Foreign rums are prohibited, and strong liquors, such as brandy, &c., give rise but to an indifferent consumption.

As a consuming country, Réunion provides in a certain measure for the material wants of its inhabitants.

The island, as noticed before, produces, besides potatoes and beans (the surplus of which finds its way to Mauritius), "maize," manioc root,

* I am unable to give any statistics on this head, no special mention of the same appearing on the "budget," this item figuring under the heading of "internal revenues."

sweet potatoes, yams, which are the basis of the nourishment of the poorer classes, and are also used for feeding the horned cattle and drag-mules employed for the purpose of agriculture.

Rice forms the basis of food for the general population, both creoles (natives of the soil) and Indians. This article of primary necessity is imported from the various Indian ports, its daily consumption being about 1,030 bags of 75 kilograms each, say 30,900 bags per month, reckoning the month at 30 days. Prices, as a matter of course, vary according to the stock on hand. The quantity in the market at the end of 1881 was 274,000 bags, equivalent to about 9 months' consumption.

Independently of the articles of consumption denominated as coming within the range of "luxury," such as French wines, sweet liquors, alimentary preserves, &c., all of which goods are largely supplied by the mother country, India sends to the colony principally rice, wheat, castor-oil, and lard; Australia, flour and wheat; England, coals; the Cape and Muscat, salt fish; South America (Buenos Ayres and Montevideo), mules* and horses; from the Straits of Torres and Sunda, ponies; Madagascar, bullocks, white table-rice, salt beef, together with coffee, cloves, orchilla, gutta-percha, tanned leather, rawhides, straw bags, all of which latter articles are hence exported to various regions; and, finally, the United States of America, petroleum, lard, salt, pork, and timber (pitch-pine).

Petroleum is the common agent for lighting the town of St. Denis and the "communes." It is also exclusively used by the general public as an illuminator, and in numbers of homes is employed for culinary wants. The stoves used for the purposes aforesaid, though stated to be "American stoves," are imported direct from France and Germany. The consumption of petroleum imported direct from the United States and via Mauritius may be set down at about 13,000 cases yearly.

From what precedes, it is evident that the commercial relations between Réunion and the United States have been hitherto, and are still, more restricted than with other countries; and the same observations might apply to American shipping, so far as employment is concerned, as shown by the tabular statements marked E and F, hereunto annexed. This state of things, I admit, may be, with some reason, ascribed to the fact that but with two or three exceptions American ship-owners have not found sufficient inducement, perhaps for want of reliable information, to open up a regular trade with this island, which, if experimented within reasonable limits, might eventually lead to more important operations, and prove beneficial to the interest of American manufacturers, ship-owners, insurance companies, &c. On the other hand, it is obvious that if English and other foreign flags can load in France, England, India, and other ports, general merchandise, coals, railway plants, grains, &c., direct from Réunion, it is obvious, I say, that the same adventures are open to American shipping, since they carry on this trade, on a limited scale it is true, with the neighboring island of Mauritius. Sugar especially has been of late shipped from that colony, to some extent, for New York, and there seems to be no plausible motive why it should not be so for this colony.

There is another point of importance for American interest on which I beg to invite the attention both of the Department of State as also that of ship-owners. I refer especially to those owning vessels for whale-fishing. For the last two or three years "whalers" which were in the habit of beating our seas for the purpose of whale-fishing have totally

*These animals are also imported from France, and are employed for agricultural purposes.

disappeared; and yet it may be ascertained, so far as the colony is concerned, that since the last fifteen or eighteen months numbers of whales are seen from time to time passing the island. I believe that my honorable friend and colleague of Mauritius* has already reported on the same question to the Department; and if such is the case, I feel most happy to join him in his remark thereon, and trust that American owners will take the facts that are brought to their knowledge in due consideration and adopt such steps as they may deem fit under the circumstances.

There is likewise another point of considerable importance which forms, so to speak, a corollary to the two preceding paragraphs. I refer to the railway all around the island, and to the harbor, both now in course of construction.

1st. The railway, which is very nearly completed, part of which will be opened for traffic in the month of February next, 1882, at the same time as it will tend to make St. Denis, St. Paul, and St. Pierre the "emporia" of the island, by centralizing in these "communes" the whole of the commercial business, inwards and outwards, cannot fail to insure much less loss of time and expense to ship-owners by affording more facilities to shipping for the general run of trade than has been experienced up to the present time, the necessity to which ship-masters have been subjected to land and load at various points on the coast being by this means done away with.

2d. The harbor at the Pointe de Gallets, to which I refer in Chapter IV, will, it is expected, be completed in about eighteen months hence. It will fill up a gap which has been all along most anxiously looked for, by affording both shelter and security, as Mauritius does, to shipping that will frequent this island. The history of the losses of life and property occasioned during the hurricane season by the want of a safe harbor has been, from time to time, much to be regretted, with the redeeming feature that stares us in the face that on the harbor being completed the colony will be spared a repetition of those maritime disasters, at the same time that vessels now seeking refuge in Mauritius will then be in a position to avail themselves of as safe a port, with all the advantages, to be found in the sister island.

The lighterage establishments are all united, and have the monopoly of the discharging and shipment of goods. Vessels are attended to in order of rotation, the charges being in either case 7.50 francs ($1.50) per ton, according to description of merchandise and package.

The commercial commissions are chargeable, in accordance with the tariff of the "Chamber of Commerce," as follows: On sales and purchases, 2½ per cent.; *del credere*, 1½ per cent; remitting, 1 per cent.; brokerage, ½ per cent.

The duties leviable on exported and imported goods from the 1st of January current, as per new tariff, can be gathered from Annex G, together with pilotage dues, postages, &c.

MISCELLANEOUS.

The colony possesses, besides, four banking establishments,† one of which the "Banque de la Réunion," is under the immediate control of

* Thomas T. Prentis, esq., United States consul.

† The "Banque de la Réunion," the "Crédit Agricole et Commercial," the "Banque Française des Colonies," and the "Crédit Foncier." I annex tariff of rates of interest of the three first.

government; several insurance companies, life and fire; chambers of commerce and agriculture; a museum; botanical garden; turf club; a racing society, for the introduction and amelioration of the breed of horses; a society of arts and sciences; hospitals, military and civil; chamber of brokers; telegraph office; newspapers, eight, including "Official;" and various other institutions common to all civilized countries.

In conclusion, it is most gratifying to me to be able to report that, from the time of the assumption of my duties, my relations with the local authorities, from the governor downwards, have been of the most pleasing character, the utmost good-will prevailing among us, and great sympathy having been evinced for me in every quarter. So has it been with my honorable colleagues, the consuls for Great Britain, Italy, Portugal, and Belgium.

I may add that I have used my best endeavors to render this my report as complete and interesting as possible, and if my aim has been accomplished it shall afford me satisfaction. If, in the exercise of my functions or otherwise, I can render assistance and advice susceptible of advancing the commercial and shipping interests of the States, I shall be ever eager to do so, sparing no trouble or pains to attain this end.

A. LANGLOIS,
Commercial Agent.

ST. DENIS, RÉUNION,
January 16, 1882.

Statement showing the number of vessels (sailing and steamers) that have arrived at Réunion from January 1 to Decemer 31, their aggregate tonnage, nationalities, cargoes, and the places from which they were cleared.

Places from which cleared.	Cargoes.	French.		Foreign.		Totals.	Aggregate registered tonnage of—			
		Sailing vessels.	Steamers.	Sailing vessels.	Steamers.		French sailing vessels.	French steamers.	Foreign sailing vessels.	Foreign steamers.
Marseilles	General	10	2	*1	†1	14	4,950	2,370	446	1,090
St. Nazaire and Nantes	do	12	.....	.....	.....	12	4,931	.....	.....	.....
Bordeaux	do	3	1	.....	.....	4	1,963	362	.....	.....
Havre	do	1	.....	.....	†1	2	388	.....	.....	1,061
Calcutta	do	27	.....	5	.....	32	14,031	.....	2,734	.....
Chittagong	do	6	.....	2	.....	8	2,067	.....	1,408	.....
False Point	do	2	.....	.....	.....	2	793	.....	.....	.....
Kaukal	do	2	.....	.....	.....	2	548	.....	.....	.....
Cocanado	do	8	.....	.....	.....	8	2,918	.....	.....	.....
Cardiff	do	3	.....	.....	.....	3	1,602	.....	.....	.....
Middlesborough	Rails	.....	.....	4	.....	4	.....	.....	2,156	.....
Cape Town	General	.....	.....	4	.....	4	.....	.....	462	.....
Port Elizabeth	do	1	.....	.....	.....	1	462	.....	.....	.....
New York	do	.....	.....	1	.....	1	.....	.....	689	.....
Adelaide	Wheat	.....	.....	1	.....	1	.....	.....	354	.....
Buenos Ayres	Mules	4	.....	1	.....	5	2,074	.....	441	.....
Martinique, St. Pierre	Codfish	2	.....	.....	.....	2	549	.....	.....	.....
Montevideo	Mules	3	.....	.....	.....	3	1,393	.....	.....	.....
St. Paul and Amsterdam	Fish	1	.....	.....	.....	1	74	.....	.....	.....
		‡85	3	19	2	109	38,743	2,732	8,390	2,151

* Italian vessels from Marseilles with general merchandise.
† English steamers with railway materials.
‡ Exclusive of, 1st, the M. M. mail-steamers plying monthly between Aden, Seychelles, Réunion, and Mauritius, and back; 2d, two lines of steamers (English and French) plying monthly between Madagascar, Réunion, and Mauritius, and back; 3d, sailing vessels carrying on trade between Mauritius, Réunion, and Madagascar, and back.

List of vessels that have cleared from Réunion during the year 1881, *from January* 1 *to December* 31.

Twenty-eight vessels (sailing and steamers) for Marseilles, St. Nazaire and Nantes, Bordeaux, Cadiz, for orders, Belle Isle, for orders, with sugar, coffee, and sundries; out of which 23 sailing vessels and 2 steamers were French, 2 sailing vessels English, 1 sailing vessel Italian; total, 28.*

Twenty-six sailing vessels (French), with ballast, Coolie returned immigrants, and sundries, for Pondichery; 15 sailing vessels (French), ballast, Calcutta; 1 steamer (English), ballast, Bombay; 5 sailing vessels and steamer, ballast, Gallo; 3 sailing vessels (French), 1 sailing vessel (English), 1 steamer (English), total 5 vessels.

Two sailing vessels (1 French, 1 English), with ballast, False Point.

One sailing vessel (French), with ballast, Chittagong.

Two sailing vessels (1 French, 1 English), sugar and sundries, Cape Town.

Two sailing vessels (French), ballast, Cocanada.

One sailing vessels (French), sundries, Muscat.

One sailing vessel (French), ballast, Diamond Island.

Seven sailing vessels (French and English), ballast, Mauritius (seeking).

One sailing vessel (American), petroleum, &c., Manila, via Mauritius.

Seventeen vessels lying in the roadstead on December 27.

Total, 109 vessels.†

TREATY OF COMMERCE BETWEEN BELGIUM AND FRANCE.

REPORT BY CONSUL WILSON, OF BRUSSELS.

I have the honor to transmit, herewith inclosed, a translated copy of a "treaty of commerce," a "treaty of navigation," and a "trade-mark and copy-right treaty," all three of which were negotiated between France and Belgium October 31, 1881; with the stipulation that their ratification should be exchanged at Paris on the 1st of February, 1882, and continue in force until February, 1892. These treaties have all been voted by the Legislative Chambers of Belgium, but in consequence of a possible modification of the conditions of the now pending "commercial treaty" between France and England that might necessitate a revision of the Franco-Belge commercial treaty, the French Govrnment has not yet ratified any of them.

The journals of this morning, however, announce the fact that the commission appointed by the French Chamber of Representatives to examine the commercial and navigation treaties, after discussing an amendment proposed by the Chamber of Representatives of that part of the commercial treaty relating to woolen and cotton yarns and stuffs, have rejected it, and by a majority of twelve to three have voted the adoption of both treaties without modification; and as the chamber will doubtless concur with the report of its commission the exchange of ratifications may be expected within a very short time.

I have given, in the copies of these treaties, a somewhat free translation of the original text, but, at the same time, as nearly as possible, its exact sense and meaning.

JNO. WILSON,
Consul.

UNITED STATES CONSULATE,
Brussels, March 14, 1882.

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*Out of which 18 vessels were loaded with sugar, coffee, &c., of crop 1880 to 1881. On November 25th ultimo 10 vessels had been cleared for French ports, Cadiz, and Belle Isle, for orders, with 5,739,494 kilograms sugar (crop 1881 to 1882). In December 4 vessels were loading, 2 for Cadiz, for orders, 1 for Belle Isle, for orders, 1 (steamer) for Marseilles.

†Exclusive of vessels (colonial and others) plying and carrying on trade with Réunion via Mauritius and Madagascar, and *vice versa*, as already stated in preceding tabular statement E.

Treaty of commerce between Belgium and France, concluded the 31st October, 1881.

His Majesty, the King of the Belgians, and the President of the French Republic, animated by an equal desire to preserve the friendly relations uniting the two people, and regulate, by conciliating their respective interests, the commercial situation which will result to the two countries by the near expiration of the conventions at present in force, have resolved to conclude a treaty to this effect, and have appointed for their plenipotentiaries, namely:

His Majesty, the King of the Belgians; the Baron Bayens, his envoy extraordinary and minister plenipotentiary near the government of the French Republic, grand officer of his royal order of Leopold, grand officer of the national order of the Legion of Honor, &c., &c., &c.; the Baron Lambermont, envoy extraordinary and minister plenipotentiary, secretary-general of the department of foreign affairs at Brussels, grand officer of his royal order of Leopold, grand officer Legion of Honor, &c., &c.; Mr. Kindt, honorary counsellor of legation, inspector-general of industry, commander of his royal order of Leopold, commander of the national order of the Legion of Honor, &c., &c., &c.; Mr. Defacqz, inspector-general of custom-houses, officer of his royal order of Leopold, officer of the national order of the Legion of Honor, &c., &c., &c.

The President of the French Republic; Mr. Barthélemy Saint Hilaire, senator, minister of foreign affairs, chevalier of the national order of the Legion of Honor, &c., &c.. &c.; Mr. Tirard, deputy, minister of agriculture and commerce, &c., &c., &c.; and the count Horace de Choiseul, deputy, assistant secretary of state for the department of foreign affairs, decorated with the military medal, chevalier of the national order of the Legion of Honor, &c., &c., &c.

Who, after a reciprocal communiaction of their full powers, found in good and due f rm, have agreed upon the following articles, to wit:

ARTICLE 1. All merchandise of Belgian origin or manufacture enumerated in Tariff A, annexed to this treaty, and imported directly by land or by sea, will be admitted into France after paying the fixed duties of the said tariff, fractions included.

ART. 2. Merchandise of French origin or manufacture enumerated in Tariff B annexed to this treaty, and imported directly by land or by sea, will be admitted into Belgium after paying the fixed duties of the said tariff, fractions included.

ART. 3. All kinds of merchandise may be freely exported, nor shall it be subject to the imposition of any export duty by either of the two States. Nevertheless, dogs of a strong breed, contraband books and printed matter, arms and munitions of war, exported over the land frontier may be prohibited from leaving France.

ART. 4. Drawbacks based on the exportation of Belgian products, can only be claimed to the amount of the excise duty with which the interior consumption of the said products or the raw materials from which they are manufactured is taxed. In like manner drawbacks based on the exportation of French products, can only be claimed to the value of the excise duty with which the interior consumption of the said products or the raw materials from which they are manufactured is taxed. The high contracting parties may, besides the custom duties, levy on foreign merchandise, a supplementary tax equal to the excise duties with which the interior consumption of similar domestic articles or the raw materials from which they have been manufactured are or may be taxed. It is further agreed between the high contracting parties, that in case the excise duties or the duties on consumption of products mentioned in this article should be suppressed or diminished, the supplementary tax imposed upon products of Belgian or French origin, or manufacture shall also be suppressed or diminished to a sum equal to the reduction made on these excise duties or the duties on the consumption. In all cases of such suppression, if an inspection, control, or any other administrative action is established over the manufactured products of either country, the direct or indirect charges to which the manufacturers will be subject must be compensated by an equivalent tax imposed on the products of the other country.

ART. 5. The two governments reserve to themselves the right to impose upon the products into the composition or the manufacture of which alcohol enters, a duty equal to the interior taxation imposed upon alcohol.

ART. 6. All kinds of merchandise originally from any one of the two countries and imported into the other cannot be subjected to excise or consumption duties superior to those which are or may be paid on the same merchandise of domestic production. Nevertheless, the import duties may be augmented to a sum equal to the excise duties paid by the home producers.

ART. 7. It is agreed that, in case of a re-establishment of a salt tax in the Kingdom of Belgium, coarse French sea salt shall be admitted, in consequence of a supposed waste in this article, at a valuation of 7 per cent. less than that of any other country. But to be entitled to this reduction of 7 per cent., this French sea salt must be accompanied by the certificate of a consular officer of Belgium, or, where there is no consul, by the certificate of a custom-house officer at the port of embarkation, stating

that the salt has not undergone any refining process in France. Parties not complying with this condition will not be entitled to the deduction of 7 per cent. until they furnish proof that the salt was refined in Belgium. The brine, being assimilated to coarse salt, will be taxed for the quantity of salt it contains, as determined by the Belgian law. French refined salt will be admitted into Belgium free of duty when used for the same purposes as those for which the Belgian law admits coarse salt free of excise duty. The Belgian Government reserves the right to limit to certain custom-houses the importation by land of French salt, and to prescribe for its transport such conditions as it may deem proper to assure the collection of the duties.

ART. 8. The excise duty on original French wines in barrels or bottles is fixed in Belgium at 23 francs the hectoliter. The import duty on the same wines is abolished. Wines containing more than 18 per cent. of alcohol will pay, in addition to the duty imposed on wines, the duty on alcohol for the quantity they contain exceeding 18 per cent.

ART. 9. Jewelry and goldsmiths' ware, in gold, silver, platina, or other metals, imported from any one of the two countries, will be submitted in the other to the system of control established for similar articles of domestic manufacture, and will pay, if necessary, the same duty on stamp marks for the security of value.

ART. 10. Merchandise, not originally from Belgium, which may be imported from Belgium into France, either by land or sea, cannot be taxed with higher rates than those imposed upon similar merchandise imported into France from any other European country, excepting that imported directly by French ships. Belgium reserves the right to impose upon all merchandise coming from France, but not of French origin, a surtax equal to that imposed in France on importations from other foreign countries, not carried by French vessels. Common wood, imported from Belgium into France by the land frontier, will be freed from the tax established by the law of the 7th May, 1881. The taxes imposed by the same law will be reduced, for coffee, to 5 francs per 100 kilograms, and for cocoa, to 10 francs per 100 kilograms, fractions included. The French Government further agrees, during the continuance of this treaty, not to augment the additional tax at present imposed in virtue of the fourteenth article of the treaty of the 1st May, 1861, on the following-named products imported from Belgium, either by land or by sea, viz: Cabinetmakers' wood, dye-wood, raw cotton, wool, raw hides, rice, potash, guano, exotic rosin, saltpeter, tea, oleaginous grain, lard, tallow, and oils.

ART. 11. To facilitate the circulation of agricultural products on the frontier of the two countries, cereals, in sheaves or ears, hay, straw, green fodder, forage roots, pulp of beet roots and manure, situated within a radius of ten kilometers on each side of the frontier, may be reciprocally imported and exported free of duty, with the reserve, however, of the right to adopt in both countries such measures as will keep a proper control over these operations.

ART. 12. The French Government agrees, during the continuance of this treaty, not to augment the duty now imposed upon the importation into France of coal, coke, and coal-bricks of Belgian origin. Nor may the duty upon the importation into Belgium of coal, coke, and coal-bricks of French origin, in any case, be more than one franc per 1,000 kilogrammes.

ART. 13. Each of the two high contracting parties may require of an importer in order to prove the origin or place of manufacture of the articles imported, to present to the custom-house officers of the country of importation, either an official declaration of origin, made before an officer at the place or city whence the expedition is made, or a certificate delivered by the chief custom-house officer of the place of exportation; or else a certificate of the consular officers of the country from whence the importation is to be made, and whose residence is in the place of expedition or at the port of embarkment. A consular officer must legalize the signatures of local authorities.

ART. 14. The ad-valorem duties agreed upon in this treaty will be calculated upon the value of the imported merchandise at the place of origin or manufacture, to which will be added the freight, insurance, and commission necessary for the importation to the place of destination in either of the two countries.

ART. 15. In France all disputes or contestations as to the nature, origin, or value of imported merchandise will be tried conformably to the general laws now in force; and in Belgium all similar contestations as to the nature, kind, or class of the merchandise will likewise be tried conformably to the present Belgian laws. In regard to disputes as to value, if the Belgian custom-house officers judge the declared value insufficient, they can retain the merchandise by paying to the importer the declared value augmented by 10 per cent. This payment must be made within fifteen days after the declaration is made, and all duties collected on such merchandise must be returned.

ART. 16. Declarations must contain all indications necessary to levy the duties; thus, besides the nature, kind, quality, origin, and destination of the merchandise, they must also express the weight, number, measure, or the value, as the case may be. If, by exceptional circumstances, it should be impossible for the party making the declaration to indicate the quantity imported, the custom-house officer may permit him to verify for himself, at his cost, in a place designated and agreed upon, the weight,

measure, or the number, after which the importer will be obliged to make his detailed declaration of the merchandise within the delay prescribed by the laws of each country.

ART. 17. Regarding merchandise which is subject to a duty on the net weight, if the party making the declaration wishes to pay only the net, he must indicate that weight in his declaration, otherwise the duties will be established on the gross weight with deduction of the legal tare.

ART. 18. It is agreed between the high contracting parties that the duties established by this treaty will be subject to no reduction for any damage or deterioration whatever caused to merchandise.

ART. 19. For setting the established rates on linen, hemp, or jute tissues, bleached or unbleached, the French custom-house officers will be governed by the types agreed upon by the two governments in the *procès verbaux* of the 1st May, 1861, and the 13th June, 1863, which will be annexed to the present treaty. In the verification of Belgian textures, where the threads are counted, all fractions of a thread will be omitted.

ART. 20. Importers of mechanical machines, or detached parts of machines, and all merchandise enumerated in this treaty, shall not be obliged to produce models or designs of the imported objects to the custom-house officers of either of the two countries.

ART. 21. All kinds of merchandise coming from or going to any one of the two countries will be reciprocally exempted in the other country from all transit duties. The transit of counterfeited merchandise is prohibited; that of gunpowder, arms, and munitions of war may be either prohibited or submitted to special authorization. The treatment of the most favored nation is reciprocally warranted to each of the two countries concerning transit.

ART. 22. Belgian commercial travelers, traveling for a Belgian firm in France, will be required to pay for a patent for this privilege 20 francs; and, reciprocally, French commercial travelers traveling for a French firm in Belgium will also pay for a similar patent 20 francs.

ART. 23. All objects subject to an import duty used as samples and imported into Belgium by commercial travelers of French houses, or into France by Belgian commercial travelers, will be admitted into both countries, temporarily, free of duty, provided that the necessary formalities shall have been complied with to assure their re-exportation or return to the custom-house. These formalities will be the same in Belgium and France, and will be regulated by a mutual arrangement between the two governments.

ART. 24. The conditions of this treaty of commerce shall also apply to Algeria for the exportation of the products of that possession, as well as for the importation of Belgian merchandise into it.

ART. 25. Each of the two high contracting parties agrees to accord to the other all favors, privileges, or reductions in the tariffs upon importations or exportations of the merchandise mentioned or not mentioned in this treaty, that any one of them will ever allow to another power. They also pledge themselves not to establish any duties or prohibitions, one against the other, that are not at the same time applicable to all other nations.

ART. 26. It is understood that each of the high contracting parties reserves the right to pronounce in regard to merchandise specified or not in this treaty, such temporary prohibitions or restrictions of entry, exit, or transit that it may deem necessary, from sanitary motives, to prevent the propagation of epizootic disease, the destruction of the harvest, or in case of war.

ART. 27. This treaty shall take effect the 9th day of February, 1882, and will remain in force until the 1st day of February, 1892. In case that neither of the two high contracting parties shall have notified to the other, twelve months before the end of the said period, its intention to terminate this treaty, it will still be binding and in force until the expiration of one year from the date of the notification of its renunciation of any one of them to the other. The high contracting parties reserve the right to introduce by mutual agreement such modifications in this treaty as will not be in opposition to the meaning and intent thereof, and the usefulness of which will be proved by experience.

ART. 28. This treaty will be ratified and the ratifications exchanged at Paris previous to the 1st of February, 1882, and simultaneously with two other conventions relating to navigation and literary property.

In witness whereof the respective plenipotentiaries have signed and attached their seals thereunto.

Made in duplicate at Paris this 31st day of October, A. D. 1881.

[L. S.] BARON BEYENS.
[L. S.] BARON LAMBERMONT.
[L. S.] J. KINDT.
[L. S.] A. DEFACQZ.
[L. S.] BARTHÉLEMY SAINT HILAIRE.
[L. S.] P. TIRARD.
[L. S.] HORACE DE CHOISEUL.

Treaty of copyright and trade-marks.

His Majesty the King of the Belgians, and the President of the French Republic, animated by an equal desire to protect science, art, and letters, and encourage their application to industry, have therefore resolved by mutual agreement to adopt such measures as seemed to them best adapted to secure, in the two countries, to authors and industrials, or to their assigns, the property of literary works, works of art, models, designs, and trade-marks, and have to this effect appointed for their plenipotentiaries, namely:

(Here follow the names of the same plenipotentiaries that negotiated the treaty of commerce.)

ART. 1. Authors of books, pamphlets, or other writings, dramatic works, musical compositions, designs, illustrations, paintings, sculptures, engravings, lithographs photographs, and all other analogous productions in the domain of art or literature shall enjoy, in each of the two countries, reciprocally, the same advantages and right of property guaranteed by law to the authors of literary or artistic works, and shal have the same protection and the same legal recourse against all infringements o their rights, as are secured by law to the citizens of each of the two countries, respectively. But these advantages shall only be reciprocally assured to such parties during the existence of their rights in the country where the original publications have been made, and can in no case exceed them. The property of musical compositions includes also pieces called "arrangements," composed of extracts from original works. Contestations or disputes resulting from the application of this clause, will remain, as heretofore, under the jurisdiction of the respective tribunals. All privileges or advantages which in the future may be accorded by any one of the two countries to another foreign power, regarding literary or artistic property, the definition of which has been given in this article, will at the same time be acquired by the citizens of the other.

ART. 2. The right of publication in Belgium of books composed of extracts from French authors is accorded, provided they are intended for the purposes of teaching the French language.

ART. 3. To insure to all literary or artistic works the protection stipulated in the first article of this convention, and to permit the authors and editors of the works to institute proceedings against counterfeits before the tribunals of either of the two countries, it will be sufficient if the said authors or editors substantiate their rights to the property by producing a certificate of the proper public officer of their country, stating that the work in question is an original, which, in the country where it was first published, has all legal protection against counterfeits or illicit reproductions. For works published in France this certificate must be given by the bureau of libraries at the department of the interior, and must be legalized by the Belgian legation at Paris. For works published in Belgium, it must be given by the department of the interior at Brussels, and must be legalized by the legation of France.

ART. 4. The stipulations of the first article of this convention apply equally to the performance or execution of dramatic or musical compositions, published or performed for the first time in any one of the two countries since the 12th May, 1854. Rights guaranteed to dramatic authors or composers may be modified by an arrangement between interested parties.

ART. 5. All translations of domestic or foreign works made in any one of the two countries are expressly assimilated to original works. These translations will consequently enjoy all the protection stipulated for in article 1 concerning reproductions not authorized in the other country. It is, nevertheless, well understood that the object of this article is simply to protect the translator's version of the original work, and not to confer the exclusive right of translation on the first translator of any book written in a dead or spoken language, excepting in those cases provided for in the following article.

ART. 6. The author of any work published in one of the two countries shall alone enjoy the right of translation during ten years, commencing from the day of publication of the original work, under the following conditions:

1st. The author must indicate, at the head of his work, his intention to reserve for himself all rights of translation.

2d. The said authorized translation must be entirely published within a delay of three years from the date of the publication of the original work.

3d. For work published in numbers, it will be sufficient if the author makes his declaration to reserve all rights of translation for himself in the first number. In regard, however, to the limit of ten years, given by this article to an author as the limit of his right of translation, each number will be considered as a separate work.

4th. In relation to the publication or performance of translated dramatic works, the author who desires to reserve for himself the exclusive right mentioned in this article must publish or perform his translation within three years from the date of the publication or performance of the original work. If the laws of Belgium regarding the right of translation should be modified during the continuance of this convention,

the new advantages made in favor of Belgian authors will likewise be enjoyed by French authors. In like manner, Belgian authors will enjoy in France all new advantages that may be given to native authors by a modification of the general laws. These respective rights are, however, subject to the conditions provided for in the 2d paragraph of article 1.

ART. 7. Legal representatives or assignees of authors, translators, composers, designers, painters, sculptors, engravers, lithographers, photographers, &c., will enjoy the same rights as those accorded by this convention to original authors, translators, composers, designers, painters, sculptors, engravers, lithographers, and photographers themselves.

ART. 8. Notwithstanding the stipulations of articles 1 and 5 of this convention, extracts from journals and periodicals published in one of the two countries may be reproduced or translated in journals or periodicals of the other country, provided that the source from which they have been taken is indicated. But this permission to reproduce, in any one of the two countries, articles or extracts from journals or periodicals published in the other cannot be granted if the authors have declared formally in the journal or periodical in which they were originally published that they prohibit reproduction. This prohibition can in no case apply to articles upon political discussions.

ART. 9. The introduction, exportation, circulation, sale, or exposition of works or objects of unauthorized reproduction, defined in articles 1, 4, 5, and 6, is prohibited in each of the two countries whether the non-authorized reproductions come from one of the two countries or from any other foreign country.

ART. 10. In case of contravention against the conditions of the preceding articles the seizure of the counterfeit objects shall be made, and the tribunals shall apply the penalties determined by the respective laws in the same manner as if the infraction had been committed to the prejudice of a work or production of domestic origin. The character of the counterfeit will be determined by the tribunals of one or the other country according to the laws in force in either of the two countries.

ART. 11. Books and other productions mentioned in this convention, of legal importation, coming from Belgium, will continue to be admitted into France, either for entry, depot, or direct transit through all custom-houses that now are or may hereafter be open to receive such articles. If persons interested desire it, books declared for entry may be sent directly to the interior department of France and to the government warehouse at Brussels to undergo the necessary verification, which will be made, at the latest, in a delay of fifteen days from their arrival.

ART. 12. The conditions of this convention cannot in any way prejudice the right that appertains to each of the two high contracting parties to permit the overseeing or prohibition by legislative measures or by the interior police the circulation, performance, or exposition of any work or production over which the competent local authority should exercise this right. Each of the two high contracting parties, in addition, reserves the right to prohibit the importation into its own country of books which, according to its interior laws, or stipulations signed with other powers, are or may be declared to be counterfeits.

ART. 13. The Belgian Government and the French Government will adopt the necessary measures to prohibit the entry into their respective territories of books which Belgian or French editors may have acquired the right to reprint, with the reserve that these publications can only be sold in Belgium, France, or the markets of some other country. The works to which this condition is applicable must indicate under their title and cover the words: "Prohibited edition (in Belgium) in France, and authorized for (France) Belgium and foreign countries."

ART. 14. Belgians in France, and, reciprocally, Frenchmen in Belgium, will enjoy the same protection as citizens in everything regarding commercial trade-marks, industrial designs and models of all kinds. The exclusive right to an industrial design or model cannot exist for a longer period in favor of Belgians in France, and, reciprocally, in favor of Frenchmen in Belgium, than that allowed by law to the citizen to whom it has been accorded. If an industrial design or model is public property in the country of its origin, it cannot be claimed as an exclusive property in the other. The conditions of the preceding two paragraphs are applicable to all kinds of commercial trade-marks. The right of Belgians in France, and, reciprocally, the rights Frenchmen in Belgium are not conditional upon the obligation to there manufacture their industrial models or designs.

ART. 15. Citizens of any one of the two countries who wish to secure the property of a trade-mark, design, or model in the other, must comply with the formalities prescribed for this purpose by the respective laws of the two countries. Trade-marks, to which the articles 14 and 15 of this convention are applicable, are those which in the two countries are legally acquired and employed by merchants and manufacturers, or in other words, the character of a French trade-mark must be determined according to the French law, and in like manner a Belgian trade-mark by the Belgian law.

ART. 16. This convention shall take effect at the same time as the treaty of commerce and the convention on navigation, concluded this day between the high con-

tracting parties, and will remain in force until the 1st of February, 1892. In case that neither of the two high contracting parties shall have notified to the other twelve months before the end of the said period its intention to terminate this treaty, it will still be binding and in force until the expiration of one year from the date of the notification of its renunciation by any one of them to the other.

ART. 17. This convention will be ratified, and the ratifications exchanged, at Paris, previous to the 1st of February, 1882, and simultaneously with the treaty of commerce and the convention relating to navigation concluded this day between the high contracting parties.

In witness whereof the respective plenipotentiaries have signed and attached their seals thereunto.

Made in two originals at Paris this 31st day of October, A. D. 1881.

Convention relating to navigation.

HisM ajesty the King of the Belgians, and the President of the French Republic, animated by an equal desire to contribute to the development of the maritime relations between the two countries, have resolved to conclude a convention to this effect, and have appointed for their respective plenipotentiaries, namely:

(Here are inserted the names of the same plenipotentiaries that negotiated the treaty of commerce.)

ARTICLE 1. There shall be full and entire liberty of commerce and navigation between citizens of the two high contracting parties. Citizens of any one of them, whether permanently established or only temporarily residing in any port, city or other place of the other, shall not be compelled to pay, in their commerce or industry, any other or higher duties, taxes, or impositions, under whatever name they may be denominated, than those collected from native citizens, and the privileges, immunities, or whatever other favors the citizens of one of the two countries enjoy regarding commerce, industry and navigation will be common to those of both.

ART. 2. Belgian vessels, with or without cargoes, in France and Algeria, and French vessels, with or without cargoes, in Belgium, on their arrival in any port of either of the countries, whatever may be the place of origin or destination of their cargoes, will enjoy in all respects at their entry, during their sojourn, and on leaving, reciprocally, the same treatment.

The foregoing conditions will not apply to the coasting-trade, which will continue to be regulated by the respective laws of the two countries. It is agreed, however, that the vessels of both nations engaged in the coasting-trade shall be treated reciprocally on the same footing as those of the most favored nation.

ART. 3. The following vessels will be admitted completely free from tonnage and expedition duties in the respective ports.

1st. Ships entering, from any port whatever, and leaving in ballast.

2d. Ships passing from any port in one of the two countries to one or more ports in the same country, on entering one of the other, whether they there dispose of all or part of their cargoes or there receive or complete them. They must, however, prove that they have already paid the proper duties.

3d. Ships entering a port, whether voluntarily or from necessity, and leaving the same without making any commercial operations. The unloading and reloading of merchandise for the reparation of a ship, its transfer to another ship in case the first should prove unseaworthy, the necessary purchases for the supply of provisions for the crew, and the sale of deteriorated merchandise when the custom-house officers have authorized this to be done, are not considered as commercial transactions.

ART. 4. The two high contracting parties reserve to themselves the right to impose duties upon the disembarkment and embarkment of all articles, mentioned or not in this treaty, to pay the necessary custom-house expenses at the ports of importation and exportation. But in all that concerns the placing of vessels, their trading and unloading in ports, harbors, or docks, and in general for all formalities and dispositions whatever to which commercial vessels, their crews, and their cargoes can be submitted, no privilege or favor will be accorded in one of the two countries, to merchant vessels, that will not be equally enjoyed by those of the other, it being the will of the two high contracting parties that in this respect French and Belgian vessels shall be treated on the footing of perfect equality.

ART. 5. The nationality of vessels will be determined on both sides according to the particular laws and regulations of each country, by patent documents, delivered by the competent authorities to captains, masters, and boatmen.

ART. 6. Belgian masters entering a French port, and, reciprocally, French masters entering a Belgian port, that only wish to unload part of their cargoes may, by conforming themselves to the laws and regulations of the respective country, keep on board the other part of their cargoes which is destined for another port, whether in the same country or not, and may re-export the same without paying any custom duties for it excepting the cost of inspection, which cannot be more than that paid by vessels of the country to which the port belongs.

ART. 7. The stipulations of articles 1, 2, 3, 4, 5, and 6, are applicable as well to the navigation of rivers and canals as to that of the seas. Belgian boatmen navigating the interior waters of France, and, reciprocally, French boatmen navigating the interior waters of Belgium, will enjoy the same treatment reciprocally in regard to patent duty.

ART. 8. The advantages or profits from the domestic fishing products which are or may be enjoyed by one or the other of the two countries are excepted from the provisions of this treaty.

ART. 9. Consuls-general, consuls, vice-consuls, and consular agents of both of the two high contracting parties residing in the cities of the other will receive from the local authorities all aid and assistance for the research, seizure, and arrest of sailors and other persons belonging to the crews of war or commercial vessels of their respective countries, whether accused or not of having committed a crime, offense, or contravention on board of the said vessel. To this effect these officers must address themselves in writing to the competent tribunals, judges, or functionaries, and prove, by the exhibition of the register of the vessel, crew-list, or other official documents, or, if the vessel has sailed, copies of the said documents, duly certified to by them, that the men they claim have really belonged to the said crew. On this demand, proved, as above stated, the necessary assistance cannot be refused. Sailors who have deserted and have been arrested will remain at the disposition of consuls-general, consuls, vice-consuls, and consular agents, and can even be detained and guarded in the prisons of the country at the demand and the expense of the said agent, who, according to circumstances, can either place them on board of the ship to which they belong, or send them back to their native country in a ship of the same or any other country, or can return them to their country by the land frontier. On their return by land they will be escorted by the public force at the demand and expense of the above said agents, but, to obtain this, they must address themselves to the competent authorities. If deserting sailors have not been replaced on board of the ship to which they belong in two months from the day of their arrest, or have not been sent back to their native country by sea or land; or if the expenses of their imprisonment have not been regularly paid by the agent at whose request the arrest was made, they will be set at liberty, and they cannot be arrested again for the same cause. Nevertheless, if deserters have committed any offense on shore, their release may be delayed by the local authorities until the competent tribunals shall have duly decided on the said offense, and until the judgment is entirely executed. It is equally understood that sailors, or other individuals of a crew, who are citizens of the country where the desertion occurs are excepted from the stipulations of this article.

ART. 10. All operations relating to the salvage of Belgian vessels, shipwrecked on the French coast, will be directed by the consuls-general, consuls, and vice-consuls of Belgium, and, reciprocally, the French consuls-general, consuls, and vice-consuls will direct all operations relating to the salvage of French vessels stranded on the Belgian coast.

The intervention of the local authorities can only be allowed to maintain order, to guarantee the interests of the sailors, if they do not belong to the stranded crew, and to see that all the necessary conditions are observed and executed for the entry and export of the saved merchandise. In the absence, and until the arrival of the consuls-general, consuls, and vice-consuls, the local authorities will take all necessary measures to protect the individuals and conserve the stranded effects. It is also agreed that the saved merchandise will not be subjected to the payment of any custom duty unless entered for interior consumption.

ART. 11. The said consuls-general, consuls, vice-consuls, and chancellors of the two high contracting parties will respectively enjoy, in the two countries, all privileges and advantages now accorded, or that may hereafter be accorded, to such officers of the most favored nation granting reciprocity.

ART. 12. The two high contracting parties agree not to grant any privilege, favor, or immunity, relating to commerce or navigation, to any other power that will not at once be granted to their respective subjects.

ART. 13. This convention shall take effect at the same time as the treaty of commerce signed this day between the high contracting parties, and will remain in force until the 1st day of February, 1892. In case that neither of the high contracting parties shall have notified to the other, twelve months before the end of the said period, its intention to terminate this treaty, it will still be binding and in force until the expiration of one year from the date of the notification of its renunciation by any one of them to the other.

ART. 14. The ratifications of this convention will be exchanged at Paris, at the same time as those of the treaty of commerce signed this day, previous to the 1st of February, 1882.

In witness whereof the respective plenipotentiaries have signed and attached their seals thereunto.

Made in duplicates at Paris this 31st day of October, A. D. 1881.

NOTES.

German exports to the United States.—Consul-General Brewer, of Berlin, reports to the Department the following as the declared exports from Germany to the United States during the first quarters of the years 1881 and 1882.

Consular offices.	For quarter ending—		Decrease.	Increase.
	March 31, 1881.	March 31, 1882.		
Aachen	$306,608 16	$440,691 22		$134,083 06
Barmen	883,994 51	1,179,658 91		295,664 40
Berlin	739,004 16	1,024,419 98		285,415 82
Bremen	192,098 37	491,309 83		299,211 46
Breslau	287,860 87	273,553 82	$14,307 05	
Brunswick	271,644 28	346,891 98		75,247 70
Chemnitz	2,968,630 48	3,408,619 92		439,989 44
Cologne	540,004 00	412,007 45	127,996 55	
Crefeld	636,777 17	1,066,638 85		429,861 68
Dantzic		5,847 06		5,847 06
Düsseldorf	440,220 96	367,925 51	72,295 45	
Dresden	157,470 68	268,151 36		110,680 68
Frankfort	555,813 35	584,395 89		28,582 54
Geestemunde	64,866 98	204,700 57		139,833 59
Hamburg	874,120 92	1,339,983 03		465,862 11
Königsberg	60,625 18	218,156 99		157,531 81
Leipsic	501,639 66	812,959 91		311,320 25
Manheim	592,929 00	734,400 00		141,471 00
Mayence	293,840 00	360,271 09		66,431 09
Munich	149,822 59	132,645 95	17,176 64	
Nuremberg	476,358 27	677,989 07		201,630 80
Sonneberg	263,763 20	315,262 59		51,499 39
Stettin	38,913 38	32,651 38	6,262 00	
Stuttgart	193,286 08	198,566 32		5,280 24
Total	11,490,292 25	14,807,698 68	238,037 69	+3,645,444 12 −238,037 69
Increase				3,407,406 43

A New Port Opened in Morocco.—The Department has advices from Consul Mathews, at Tangier, of the probable opening of the port of Agadir (Santa Cruz), by the Sultan, for trade:

The Emperor has sent orders to Casablanca, Mazagan, and Saffi to collect large quantities of wheat and barley at each of these ports, and have them ready for shipment to Agadir, whither a number of masons and boat-builders have been sent from Mogador, besides a number of officers and workmen. Arrangements are being made for the collection there of a number of lighters for the purpose of communicating with shipping. This event will bring about the fall of Mogador produce trade (a port some distance to the north of Agadir), yet the Sultan will be materially benefited thereby, inasmuch as Agadir, being his most southern port, will serve as a good shipping harbor for all the valuable produce of Sus and Wadnoon, which of late years does not reach Mogador in the former quantities, owing to the unsafety of the roads, and therefore had to be carried to Cape Juby, where the British Sus and North African Company, under McKenzie, as I have informed the Department in my dispatches Nos. 386 and 410; at the same time the Sultan hopes that by opening this port on the extreme borders of Morocco and Wadnoon he may induce the sheiks to abandon the idea of opening independent ports for themselves.

The British company at Cape Juby, by virtue of a treaty with the chiefs of that territory, have been authorized to open a traffic upon which no duties whatever are paid upon imported or exported goods, much against the will and efforts of the Sultan of Morocco, who claims sovereignty over those independent tribes. The Bay of Agadir or Santa Cruz is the best on the coasts of Morocco, having a moderate depth of water,

and being completely sheltered from all winds except those from the west. It abounds in fish of various kinds, of which great numbers are caught, salted, and sent to Mogador and the interior, and now form the sole article of trade of this once flourishing place. Provisions are good and plentiful, and abundant good water at hand.

Agadir, called in the time of Leo Africanus, Guertgueseem. is the last port in the Emperor's dominions, on the shores of the Atlantic, in latitude 30° 25′ north, twenty-one miles south of Cape Gher.

The town, which stands on the summit of the mountain, is strong by nature, and its walls are defended by ancient batteries with obsolete guns; the principal battery, now in ruins, is at a short distance from the town, down the mountain, and was originally intended to protect a fine and abundant spring of fresh water, close to the sea. This battery also commands the approach to the town, both from the north and south, and the shipping in the bay.

The articles of trade which will be exported from Agadir when open to commerce are sweet and bitter almonds, beeswax, gum Barbary or Arabic, gum sandarac, gum sandan, gum euphorbium; calf, cow, and goat skins, and skins of wild animals, pomegranate peels, citrons, olive and argon oils, morocco leathers, dates, worm seed, orris-root, ostrich-feathers, cummin-seed, ivory, ambergris, wool, cattle, and grain, and some gold, silver, and copper ores; these ores abound in the Atlas. In return for these articles of exportation and others not mentioned, the traders will import various kinds of linens and cotton goods, white and blue sallampores, American cloth, and long cloth, sugar, tea, glasses, coral beads, amber beads, pearls, shells, silks, brass and iron nails, wool and cotton manufactures, in imitation to those of Fez, nutmegs, cloves, and ginger, tobacco, beef, salt, and many other commodities.

Chinese ingenuity.—Consul Stevens writes from China as follows:

The Department requires us to report any new inventions we may see or that may come before our observation. Thus far I have seen but two. The first is a pump. I remember when I was a small boy, out in Illinois, men came around to sell a new invention, called a chain pump. The same pump has been used here for more than two thousand years. The second is double-headed tacks. No one can tell me how long they have been in use here. There are many articles in use among the Chinese that could be advantageously introduced in America, of which I have been trying to get some drawings, but they are not yet ready, and will not be in time for this report. They will, however, be forwarded as soon as possible. These implements and machinery are very crude, the people being very poor, as a general thing, and utilize everything in their power; they count, almost, the blades of grass; how much it will take to boil a cup of tea or cook their rice; they never waste for themselves, they only *squeeze* foreigners.

Cotton shipments from Bombay: a remarkable increase thereof.—Consul Farnham calls the attention of the Department to the Indian cotton trade of the past year compared with the previous year, and probability of its steady improvement. In 1881 the shipments of cotton were 1,055,000 bales. The average yearly export of the four preceding years was 800,000 bales. Consul Farnham also reports an increased home consumption, and shows that the demand for the East Indian cotton crop is more lively.

Linseed exports from India.—Consul Farnham reports that the demand for linseed has increased; the quantity shipped from Bombay alone last year being 106,843 tons, and adds: "Not a pound went to America, as the western linseed crop shuts the Bombay seed from our market."

Tariff of Zanzibar.—The Department has advices from Consul Bachelder, of Zanzibar, that the rate of duty on all articles landed there is 5 per cent. on their market value.

Spoiled American Meat.—Consul Gade reports to the department that complaints have been made in Norway, very frequently of late, concerning diseased pork said to be imported from America. The refutation of such unwarranted prejudice against American products has been made so often in these publications, that it is hardly necessary to add further

evidence of such injustice to American interests, but the following is so emphatic and so clear an illustration of the underhanded practices in foreign trade, that it will be of service as well as interest to our meat exporters:

The boards of health in the cities (of Norway) continue to examine the pork imported from abroad, but it is evident that only a partial examination of each lot can be made, and that the prescribed examination is largely a matter of form. On the other hand, some time since, trichina was found in this district in pork raised in Norway, and several persons were seriously ill from eating it. Large quantities of American salt meat have for a number of years been imported into this country for the use of the merchant-marine service, and up to this time there has been general satisfaction with this article. However, I now see that the board of health in Moss, one of our neighboring towns, has lately seized a lot of spoiled American salt meat, said to be produced in places of this country.

The attention of shipowners is therefore directed to the necessity of closely examining every barrel of American meat.

As most of the American meat imported here arrives over England and other countries, I cannot give statistics of the quantity imported from the United States, but lately the import of same from America has largely exceeded in quantity that imported from Denmark, as heretofore for the use of the many hundred Norwegian vessels.

Wheat shipment from Bombay increasing.—A wonderful increase in the export of wheat is reported by Consul Farnham, viz, 462,000 tons in 1881, against 43,200 tons, the average of preceding seven years. Previous to 1874 not a pound of wheat was shipped from that port.

Railway facilities developing India.—Consul Farnham, of Bombay, calls the attention of the department to the rapidly improving trade of India, owing to increased railway facilities and improvement of the docks of that port, &c. The Prince's dock, he says, has proved a great success, although thought to be too great an undertaking by many when contemplated. The good harvest of last year has excited the people of Bombay to new enterprise, and merchants have already projected another grand wharf, as the crop prospects are even more promising this year.

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COMMERCIAL RELATIONS OF THE UNITED STATES.

REPORTS

FROM THE

CONSULS OF THE UNITED STATES

ON THE

COMMERCE, MANUFACTURES, ETC.,

OF THEIR

CONSULAR DISTRICTS.

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CONSULAR REPORTS

ON

COMMERCE, MANUFACTURES, ETC.

JUNE. 1882.

AGRICULTURAL DISTRESS IN SOUTHERN SPAIN.

REPORT BY CONSUL OPPENHEIM, OF CADIZ.

I beg to report to the Department the following facts relating to the agricultural situation of this consular district.

This has been an extremely dry winter in Western Andalusia and Estremadura; as an illustration may be mentioned that the rainfall at Jerez, which, from October to May, usually averages from 17 to 18 inches, was this year only about 5 inches. As a consequence the wheat and other cereal crops of this district are a total failure, and the herbage of the natural pastures has already now the parched appearance it usually assumes in August. In many places the wells have dried up or are so low as to preclude irrigation, and this in conjunction with the lack of grass has forced many of the farmers to slaughter their cattle. A vast number of agricultural laborers are, in consequence of this state of things, deprived of means of support, the figures being given at from 20,000 to 25,000 in this province alone. The local governments and municipalities seem to be acting with a commendable spirit, providing many of these poor people with subsistence by the carrying on of public works, and there are preparations made to enlarge this mode of relief to a scale commensurate with the occasion. Fears were expressed that the great distress would lead to riot and lawlessness, as the Andalusian peasantry is not usually credited with much self-control; but, although a few noisy demonstrations were made at different points, nothing like a serious disturbance has thus far been experienced. At a cabinet meeting which took place at Madrid on the 14th instant, the general situation of the districts afflicted by drought was discussed.

Among other measures of relief, the free entry of foreign grain was suggested. Should this suggestion be acted upon it would throw open a valuable market to American wheat and flour. The duties on cereals at present in force are as follows: Wheat, 4.30 pesetas (about 84 cents) per 100 kilograms; all other cereals, 3.20 pesetas (about 77 cents) per 100 kilograms. Flour pays the same duty as the grain from which it is made, with 50 per cent. added thereto.

These charges generally keep American cereals out of the Andalusian market. With their abrogation, however, there is scarcely a doubt but that their importation would be profitable, and it is therefore suggested

that the attention of our grain shippers be called to the fact that such abrogation has a fair probability of being promulgated at an early date.

ERNEST L. OPPENHEIM,
Consul.

UNITED STATES CONSULATE,
Cadiz, May 22, 1882.

AMERICAN HAMS IN SWITZERLAND.

REPORT BY CONSUL BYERS, OF ZURICH.

In my dispatch No. 259, I had the honor to report that stringent regulations of this canton as to American meat importations were, as I was informed by the authorities, to be considered as partially suspended.

In that dispatch I added, however, that on the least provocation the fright as to American hams would be renewed, and the regulations enforced with greater rigor than ever.

A provocation was discovered in the early autumn. Certain hams were imported here from Germany containing trichinæ. They had been advertised, invoiced, and paid for as "first-class Westphalian hams," by a firm claiming to deal in the finest Westphalian hams only. The damaging discovery of trichinæ was no sooner made than certain of the officials, with a part of the press, and the native butchers, asserted that the hams were not German, but American.

The regulations were enforced again stronger than ever, and in a way that became equivalent to prohibition entirely.

I undertook to point out to the authorities the injustice of the proceeding, and submitted to them numerous reports and results of investigations both in France and in the United States, tending to show the extreme futility of microscopic examinations to protect against existence of trichinæ. I further showed, by indisputable evidence, that a single case of trichinosis from use of American hams had not yet been discovered in Switzerland. I, at the same time, had a private examination of the meat that had been seized, and an investigation as to its origin. The result was trichinæ were found in abundance, but there was no proof whatever that the hams came from America. On the contrary, there was and is every reason for supposing that the hams were what they were represented to be, viz, "*first-class Westphalian hams.*" It is true the seller, in his fright and in his vain desire to get out of the difficulty, pretended that he had been cheating the public, and that these *special* hams were, after all, American ones, pared down, and smoked over to *resemble* the Westphalian. There was, however, no proof of the truth of this afterthought statement; besides, in his invoice, advertisement, and letters accompanying invoice (all in my possession), he distinctly declared these hams to be Westphalian.

After my repeated and earnest protests, the authorities at last appointed a special commission to investigate the whole subject of importation of meats, microscopic examination of meats, &c. The result of this investigation was the publication of a circular order of the government which points out the uselessness of microscopic investigations of American or other meats, and fully *rescinds* the objectionable regulations of 1878, and does wholly away with police examinations of any kind;

thus making it possible to import American hams into a city and canton where former regulations had well-nigh destroyed the market.

S. H. M. BYERS,
Consul.

UNITED STATES CONSULATE,
Zurich, March 24, 1882.

AMERICAN SEDAN CHAIRS IN SIERRA LEONE.

REPORT BY CONSUL LEWIS.

I have to report the importation into this port from the United States by Messrs. Yates & Porterfield during the past year of nine sedan or Bath chairs (a light push carriage for one person), the first of the kind ever shipped from the United States to the west coast of Africa.

This was done through the personal efforts of the United States consul here, and has proved a great success, as the chairs are much lighter, stronger, and more beautiful in construction and general appearance, and are greatly preferred to the English make.

These chairs were manufactured by Messrs. Dewey's Company, East Poultney, Vt., and are pronounced the finest chairs ever brought to this place.

They are made in several styles, and sell here at from £22 to £42 each (the latter being a complete carriage with leather rain top, same as first-class top buggy).

An order for six more of these chairs has just gone forward, making fifteen inside of a year.

This is not a very big thing *per se*, but it is opening up a new item of trade with the United States, and is a step in the right direction, and has proved thus far abundantly satisfactory to the *makers*, shippers, and to all those who now have the chairs in daily use. It is very doubtful if another English chair will be brought to this market.

There is the same difference between the English and American sedan chairs as between the English and American carriages: the one is heavy and unwieldy; the other light and symmetrical.

JUDSON A. LEWIS,
Consul.

UNITED STATES CONSULATE,
Sierra Leone, May 10, 1882.

TRADE BETWEEN SAN DOMINGO AND THE UNITED STATES.

REPORT BY CONSUL ASTWOOD.

I take pleasure in stating that the present Congress now sitting is as liberal as can be desired, and every facility that can be is offered to American enterprise; almost any kind of concession within reason granted, and the rights of all thus far are respected.

The commercial prospect of this section of the island is exceedingly bright. Sugar plantations with improved American machinery are increasing rapidly. In a short time I will forward a detailed list of those

already established, with their capacities, and of those in course of erection.

The sugar crop this year will be surprisingly large; enough has already been ground to form a fair estimate of the quantity which will be produced. Several of the most experienced American planters have been estimating the yield for this section at 40,000,000 pounds for this year. I have made a careful estimate, and, in my judgment, I have estimated that the minimum yield will be 25,000,000 of pounds. As the entire crop will be shipped to the United States, the revenue accruing therefrom to our government will reach very nearly a half million of dollars. In this estimate I have not included the crop of Puerto Plata and Samana Bay.

The ministers of justice and of interior, speaking to me of their kindly relations toward our government and the rapid increase of our commercial relations, pointed to the fact that the Dominican Republic was doing more business with the United States, proportionately, than any of the American republics. Sixty-five per cent. of their imports comes from the United States, their entire sugar crop is exported thereto, and yet they have not been honored with a consul-general; but they are hopeful that in the near future, viewing the immense increase of the commerce between the two countries, that if they are not accorded the same honors as are extended to Hayti and Liberia, at least they will be accorded a consul-general to represent our government here.

They are also desirous of inducing a line of steamers to run from New Orleans, touching at several ports in the island of Cuba and Hayti, terminating the route at this port.

It is believed that with a direct communication with the South through New Orleans, together with the present line with New York, almost the entire business of the island could be done with the United States.

The large amount of sweet liquors imported from Europe and the imitation of woolen goods could be successfully supplied from New Orleans and the mills of Wassan, Mississippi, to say nothing of the lumber and shingle trade which could be conducted more conveniently than at present.

I deem it my duty to bring these facts before the Department, hoping that they may tend to facilitate and to enhance the commercial and friendly relations of the two countries.

H. C. C. ASTWOOD,
Consul.

UNITED STATES CONSULATE,
San Domingo, May 12, 1882.

AMERICAN HARDWARE IN NEW ZEALAND.

REPORT BY CONSUL GRIFFIN, OF AUCKLAND.

The trade in American hardware and ironmongery in New Zealand has made rapid strides within the last few years. The popularity and great demand for American axes, hatchets, picks, rakes, hay forks, spades, shovels, saws, trowels, bolts, nails, and other articles of American handicraft, have awakened the keenest competition on the part of British and German manufacturers, who seem never to weary of their efforts in imitating American products. It would perhaps be unjust to say that these imitations are worthless, for in truth many of them are

fair articles of merchandise and are sold at reasonable prices, but they are nothing like as good as the originals, although they are advertised as being much stronger and more durable. English hardware is generally very heavy and awkward in construction. Take for example the English locks, which many believe to be the best in use; they weigh twice as much as the American, and are so unsightly as to look a century behind the times. The long, ill-shaped iron keys used with them would be objects of wonder and curiosity in the United States. The English manufacturer, however, does not attempt to compete with the American in cabinet and trunk locks.

The American cabinet locks are not only much cheaper but more tasteful, and very nearly as durable. Those of the Eagle Lock Company, Terryville, Conn., have a large sale here and are becoming more and more popular.

Besides, the Eagle Company has the reputation of being the manufacturers of the largest variety of cabinet and trunk locks in the world. "Hedge's patent spring locks" sell very well here, and their low price is something almost marvelous. The locks turned out by the Russell & Erwin Manufacturing Company are regarded throughout the Australasian colonies as standard products.

AMERICAN PUMPS.

It is no uncommon thing to find in the catalogues of British manufacturers certain articles of hardware advertised as being made after American patterns and styles. Some houses advertised "English hand pumps with all the American improvements." Joseph Evans & Sons, Wolverhampton, England, have made strong efforts to check the sale of American hand pumps in the Australasian colonies.

In a recent article they admit that the American pumps are more strongly established and more favorably known in the Colonies than any other, but at the same time undertake to prove that they do not deserve the favor accorded to them. The article asserts most positively that the American pumps are faulty in construction and cannot be easily repaired when out of order.

Now, the truth is precisely the reverse. The American pumps are not faulty in construction, and when they get out of order it is not difficult to repair them. They are made with the most perfect exactitude, and all the parts are absolutely interchangeable, so that if any part should be lost or broken its place can at once be supplied by another of the self-same size and pattern. The advantages that the American pumps possess over those of English manufacture are certainly well known in New Zealand. No further evidence of this fact is wanted than the great popularity of the pumps of Rumsey & Co., Seneca Falls, New York, and those of W. & B. Douglas, of Middletown, Conn.

The last-named pumps carried off the prize at the International Exhibition at Philadelphia, and have, through their London agents, John G. Rollins & Co., an extensive sale in England and on the continent. The Douglas pumps are also largely used by the English army, and it is said that 1,000 of the Douglas drive-well pumps were used in the Abyssinian campaign. The British manufacturer of hardware has, however, many advantages which his American competitor does not enjoy. For instance, Great Britain has a direct trade with the colonies, while the United States has not. The bulk of American products that reach here come by way of London and Liverpool, and of course are subject to heavy charges for freight, commission, &c.

The advantages of a direct trade are manifold and need not be dwelt upon here. It is clear enough to every student of political economy that when goods are sent thousands of miles out of their way, and handled two or three times before they reach their destination, that the cost of the same must be far greater than if shipped direct.

Direct trade also does away in a great measure with the services of the commission merchant, or middleman, as he is called in the colonies. The services, however, of the middlemen are not unfrequently valuable. He is often the means of furnishing information to the consumer which the latter could not otherwise obtain. Besides, the commission merchant is generally well posted in all kinds of manufactures, a knowledge which he has acquired by hard study and long experience, and it stands to reason and common sense that he would select such articles for his customers as would be likely to give the most satisfaction, both in regard to price and quality; but it is nevertheless true that these articles cost the consumer much more money than they would if purchased from first hands.

When American goods are ordered for New Zealand through London houses they are generally handled not only by one middleman but by two or three, and the profit of each middleman is often more than that of the original producer.

There is probably now a better chance for a direct trade between the two countries than ever before. I do not doubt that the new lines of sailing-vessels established at Boston and New York will be successful, and there is strong reason to believe that the communication between the Australasian colonies and the Pacific coast of the United States will be much more frequent in the near future than at the present time, inasmuch as the outgoing and incoming boats of the Pacific Mail Steamship Company for many months past have had considerably more freight and passengers than they should be expected to carry with safety. The company will very soon be obliged not only to supply a greater number of boats for this line but much faster ones.

The following table shows the quantity and value of hardware and ironmongery imported into New Zealand for each year since 1871, exclusive of agricultural machinery, locomotives, railway carriages, &c.:

Table showing the quantity and value of hardware and ironmongery imported into New Zealand for each year from 1871 *to* 1881, *inclusive.*

Year.	County.	Number of packages.	Value.
1871	Great Britain	19,042	$501,201 00
1871	United States	782	28,840 00
1872	Great Britain	29,799	482,990 00
1872	United States	1,350	44,410 00
1873	Great Britain	44,198	1,037,290 00
1873	United States	2,614	88,270 00
1874	Great Britain	63,719	1,381,925 00
1874	United States	5,614	120,690 00
1875	Great Britain	72,856	1,289,440 00
1875	United States	5,365	117,225 00
1876	Great Britain	72,425	1,198,170 00
1876	United States	5,001	107,455 00
1877	Great Britain	73,138	1,038,865 00
1877	United States	4,159	111,620 00
1878	Great Britain	51,753	1,291,340 00
1878	United States	7,034	185,575 00
1879	Great Britain	50,365	1,136,195 00
1879	United States	8,436	178,475 00
1880	Great Britain	26,413	522,260 00
1880	United States	3,788	84,180 00
1881	Great Britain	56,182	818,140 00
1881	United States	4,639	103,550 00

The above table is valuable only as an exhibition of the quantity and value of hardware imported into New Zealand. We cannot form from it anything like a just estimate of what proportion comes from the United States, as the bulk of American hardware used in this colony is shipped by way of London, and is, of course, included in the imports from Great Britain.

It will be seen from the table that the heaviest imports of hardware occurred in 1878, when the amount was $1,476,915. The amount would be still further increased if the value of machinery and other articles, such as sheet iron and wire fencing, &c., were added to it.

WIRE FENCING.

The trade in the last-named article, wire fencing, has reached large proportions. The quantity imported varies between 6,000 and 7,000 tons per annum. About one-sixth of this fencing material is composed of barbed wire, which is exclusively an American product. Some idea of the extent to which wire fencing is used here can be formed from the statement that a ton of barbed wire will make two miles of stanch and perfect three-strand fence, and sometimes it can be made to go farther than that. This kind of fencing is much more popular in the North Island than in the South or Middle Island. The farmers in the latter island have not yet succeeded in conquering their prejudice against it. Many think that it is injurious to cattle and sheep, causing them needless pain, but the experience of the farmers in the North Island is emphatically against this theory, and barbed wire is becoming very generally regarded as the best, cheapest, and safest of all kinds of fencing. It is claimed that accidents to animals are less frequent than with the old styles of fencing, and that the most venturesome animals soon learn to avoid it.

From a work published by the Washburn & Moen Manufacturing Company, of Worcester, Mass., I learn that in the year 1881 they produced 120,000,000 pounds of barbed-wire fencing, being an increase of 39,500,000 pounds over their production for the year 1880. In the year 1874 this company produced only 10,000 pounds of fencing.

Porter & Co., of Auckland, are, perhaps, the largest dealers in barbed-wire fencing in New Zealand, and they inform me that fencing material can be bought much cheaper in the United States than in London. Some time since they purchased several invoices of barbed-wire fencing from Montreal at prices considerably less than those in the United States, but afterwards learned that the New York and Boston houses were selling barbed wire at lower rates than it could be purchased either in Montreal or England. I understand that all Porter & Co.'s orders for this material in the future will be sent direct to the United States. The inventions of the Iowa wire-stretcher, the Eureka post-hole digger, and the combined pinchers and wire-cutters are very valuable adjuncts to the erection of the barbed-wire fence, and will add greatly to its popularity.

The stretcher is said to be based on a new working principle, and made of maleable wrought iron, and will strain and keep tight sixty rods of barbed-fence strand. It will also hold itself in position while the wire is being fastened to the posts. The pincers and wire-cutters are really valuable articles. They are made of the best tempered steel, and for twisting and splicing and cutting barbed wire are unsurpassed. The hardware dealers here think very highly of the Eureka post-hole digger. It has been found to be very serviceable in damp and sticky

soil, as well as in stony and clay soil. The digger penetrates the ground like a drill, and keeps the dirt secure in the instrument until it is drawn out.

DIFFERENT KINDS OF HARDWARE.

It would be quite a difficult task for me to give in this report anything like a correct account of all the different kinds of American hardware used in New Zealand. These articles are so numerous and comprise so many different varieties that it would take a good sized volume even to enumerate them, much less describe them. I can only mention here a few of the most important articles. For instance, in certain lines, such as artisans' tools; shipwrights', carpenters', joiners', and cabinet-makers' tools; planes, chisels, adzes, augers, brace and bits, hammers, hatchets, saws, &c., the American manufacturers have so far distanced all their competitors that comparison is out of the question. The same thing can be said of the American axes and hatchets, for Hurd's, Collins's, Hunt's, Sharp's, and others are very generally admitted to be the best in the world. American weighing machines and scales are also very popular. Indeed Fairbanks' standard scales are fully as well known here as in America. They are looked upon not only as the best, but the cheapest, and as being adapted to every kind of business. They are sold in every city and town in New Zealand.

During last year great progress was made in enlargement of the trade in all kinds of plumbers' and gas-fitters' material of American manufacture in this colony, and especially in the southern cities. Many new and beautiful varieties of chandeliers, hooks, arms, and other ornamental iron and bronze work have been introduced here.

Anderson & Morrison, of Moray Place, Dunedin, make a specialty of American copper and brass goods. They issue monthly a printed catalogue of all kinds of steam fittings, such as wheeltop valves, W. & F. steam cocks, cylinder cocks and unions, gauge glasses, brass oil syphons, hinged lids, steam-boiler unions, locomotive spring balances, vacuum gauges, patent glass needle, patent lubricators, box-cheek, valves, locomotive ball valves, retention valves, safety valves, horizontal check valves, steam whistles, boiler and water gauge cocks, &c. They quote steam whistles at various prices, viz, 2-inch, $4; 2½-inch, $5.25; 3-inch, $6.87½; 3½-inch, $8.12; 4-inch, $12.50; and boiler and water gauge cocks, ¼-inch, $3.75; ⅜-inch, $4.50; ½-inch, $5.62½; ⅝-inch, $6.87½; ¾-inch, $8.12 per set. One of their agents informed me a few days ago that there was such a brisk demand for American steam fittings in New Zealand that for the present their house would be obliged to have these goods shipped here from New York *via* San Francisco.

G. W. GRIFFIN,
Consul.

UNITED STATES CONSULATE,
Auckland, New Zealand, April 19, 1882.

EXPORTS FROM AUSTRIA-HUNGARY TO THE UNITED STATES.

REPORT OF CONSUL-GENERAL WEAVER, OF VIENNA.

I inclose statement showing the value of the declared exports from Austria-Hungary to the United States for the quarter ending March 31, 1882.

The total value of all invoices authenticated in the quarter at the several consulates in the empire is $2,130,006, against $1,528,734 for the same quarter in 1881, and $2,196,837 for the same quarter of 1880, indicating for the first quarter of 1882 an increase of 40 per cent. over the same period of 1881, but a decrease of 2.6 per cent. when compared with 1880. The last result arose from unusually heavy shipments of iron ($237,634) and of wool ($79,119) in 1880, which entirely disappear from the leading articles of this quarter.

The following table gives the values of the first fifteen leading articles shipped during the past quarter compared with amounts for same period of 1881 and 1880:

Articles.	First quarter, 1882.	First quarter, 1881.	First quarter, 1880.
Fruits, dried	$546,934	$340,227	$410,675
Glassware	371,728	282,272	286,320
Buttons	326,023	282,276	376,034
Linen and cotton goods	117,248	138,262	121,635
Fancy goods and fans	88,451	54,194	33,161
Woolen and silk goods	82,065	53,203	52,395
Pipes and pipe-fixtures	70,455	52,296	40,694
Leather and skins	68,013	60,207	115,885
Lentils	66,754	.....	.....
Tartar, crude	49,617	.....	.....
Drugs and chemicals	36,046	37,584	6,165
Gum	30,074	21,573	74,706
Pottery	25,733	21,360	5,169
Insect powder	23,043	37,098	28,380
Musical instruments	22,800	17,900	25,024
All other articles	214,022	130,182	620,592
Totals	2,139,006	1,528,734	2,196,837

From the foregoing table it will be seen that the shipments of glassware, fancy goods, woolen textiles, and pipes and smokers' articles manifest considerable constant increase, while most of the remaining articles vary according to no fixed rule, and that of the value of the total exports 25½ per cent. is dried fruits, 17 per cent. glassware, 15½ per cent. buttons, 9 per cent. textiles, 4 per cent. fancy goods, and 3 per cent. each pipes, glove-leather, and lentils.

JAMES RILEY WEAVER,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
Vienna, April 15, 1882.

Statement showing the value of declared exports from the consular districts of Austria Hungary (agencies included) to the United States of America, during the quarter ending March 31, 1882.

Articles.	Budapesth.	Prague.	Trieste.	Vienna.	Total.
Bed feathers	.....	$1,543 60	.....	.....	$1,543 60
Books	.....	1,435 23	.....	.....	1,435 23
Buttons	.....	28,999 32	.....	$297,024 16	326,023 48
Cloth and woolen goods	.....	33,143 87	.....	30,597 51	63,741 38
Drugs and chemicals	.....	6,143 85	$20,014 13	9,888 05	36,046 03
Fancy goods and jewelry	.....	4,613 99	.....	49,082 69	53,696 68
Fans	.....	.....	.....	34,754 01	34,754 01
Fruits, dried	$123,496 92	.....	406,340 05	17,097 52	546,934 49
Furniture	.....	.....	.....	9,875 17	9,875 17
Glassware	.....	371,073 40	.....	655 10	371,728 50
Gloves	.....	.....	.....	19,295 24	19,295 24
Gum	.....	.....	30,073 71	.....	30,073 71

Statement showing the value of declared exports, &c.—Continued.

Articles.	Budapesth.	Prague.	Trieste.	Vienna.	Total.
Hair, human		$8,953 21			$8,953 21
Insect powder			$23,042 67		23,042 67
Leather, skins, and furs		7,112 13	16,769 05	$44,131 53	68,012 71
Lentils	$63,131 00			3,622 82	66,753 82
Linen and cotton goods		9,460 10		107,788 16	117,248 26
Mineral water	6,941 70	1,952 27			8,893 97
Musical instruments				22,799 83	22,799 83
Oils	346 55		15,524 13		15,870 68
Pipes and pipe fixtures				70,455 36	70,455 36
Porcelain and pottery	116 54	17,881 51		7,735 26	25,733 31
Rags			12,269 37		12,269 37
Seeds			8,386 29		8,386 29
Shawls				3,582,20	3,582 20
Silks and velvets				14,741 62	14,741 62
Sponges			9,449 64		9,449 64
Tartar, crude				49,616 67	49,616 67
Toys		1,718 80			1,718 80
Wine, beer, and liquor	4,012 31	9,866 26		1,676 84	15,555 41
Wool			16,328 05		16,328 05
Miscellaneous		9,678 42	67,129·91	7,638 56	84,446 89
Total in United States gold	198,045 02	513,575 96	625,327 00	802,058 30	2,139,006 28
Total for same quarter 1881	29,737 33	363,964 66	471,186 25	663,845 69	1,528,733 93
Increase	168,307 69	149,611 30	154,140 75	138,212 61	610,272 35

NOTE.—The average value of the Austrian paper florin during the quarter was equal to 40.50 cents at Budapesth, 40.60 cents at Prague, 40.55 cents at Trieste, and 40.56 cents at Vienna.

TRADE BETWEEN SONNEBERG AND THE UNITED STATES.

REPORT BY CONSUL WHARTON.

I have the honor to report an ever increasing trade between the Sonneberg district and the United States. The statement of declared exports for the quarter ending March 31, 1882, shows an increase of $51,499.39 over the corresponding quarter of last year. I have already referred to the evidences of increased trade growing out of the erection of new factories in Sonneberg and the adjoining villages, the increase of population, and the contemplation of new railroad projects. We have additional evidences from two circumstances to which I now refer. The first is the large number of American merchants who have during the past two months visited Sonneberg and other places in the district, for the purpose of buying goods. For many years it has been the custom of American importers, of such goods as are manufactured in this region, to come to Sonneberg during the months of February and March, and making Sonneberg, where their largest purchases are made, their headquarters, radiate therefrom into different parts of Thuringia, visiting such factories and buying such goods as they needed. This year the number has greatly increased, amounting to about sixty, and these representing the leading houses in New York, Boston, Philadelphia, Chicago, and San Francisco. While the hotels in Sonneberg ordinarily afford ample accommodation, sometimes during the season they have been so crowded that accommodation could with difficulty be obtained; for not only the American merchants had to be provided for, but others came from South America, England, France, and even from Turkey.

There is one thing I have noticed in regard to the American visitors, and that is, they are nearly all German-speaking people. They are generally either natives of Germany, having emigrated to the United States many years ago, or are the descendants of German ancestors.

This is the reason, I take it that they are so well acquainted with German manufactures, and know so well the places where the best and cheapest goods are made, and which are best adapted to the American markets. The goods here they represent as equally desirable and quite as cheap as formerly, while their enlarged purchases have arisen on account of the prosperity existing in the United States—an increased demand being the result of it. One article in particular they represent as much dearer, and that is glass pearls (or beads). These are manufactured at Lautha, about twelve miles from Sonneberg, and the demand has been so great that the factories, taxed to their utmost, have been unable to supply it. The price increased in three weeks' time over 200 per cent., and several merchants whiled away the time in the little town watching the daily products of the factories, and seizing them at almost any price as soon as they were turned out.

What has occasioned this unusual demand for glass beads I cannot say, but suppose it to be some new style of decoration in vogue among the American ladies. The second circumstance to which I adverted is the fact that this year, during the months of February and March, the Sonneberg "season," several manufacturers from other districts, such as Nuremberg and Chemnitz, have come to Sonneberg and opened sample rooms of their wares with a view to catching the American trade. These goods consisted largely of dolls, toys, paint-boxes, baskets, china, and fancy goods. This is altogether a new feature of the Sonneberg trade, and it is thought it will increase each year until there will be a kind of annual fair held at Sonneberg during these months, much smaller of course, but somewhat similar to the celebrated Leipsic fairs. Manufacturers from all parts of Germany show a great disposition to form the acquaintance and secure the trade of these American buyers.

M. B. WHARTON,
Consul.

UNITED STATES CONSULATE,
Sonneberg, April 6, 1882.

THE MANUFACTURES AND EXPORTS OF SHEFFIELD.

REPORT BY CONSUL WEBSTER.

Exports to the United States.—I have the honor to present herewith a statement showing the nature and value of the exports from this consular district to the United States during the quarter ending March 31, 1882; together with some observations upon certain branches of Sheffield trade.

Steel rails.—During the quarter just closed an important announcement has been made of considerable interest to Sheffield and neighborhood. It is that the Bessemer steel rail works of Messrs. Wilson, Cammell & Co., limited, are to be removed to Workington, a town in Cumberland, on the Irish Sea.

These works are now located at Dronfield, a small village on the Midland Railway, six miles south, and almost a suburb of this rapidly extending town. They are an offshoot of the large and well-known firm of Messrs. Charles Cammell & Co., by whom they have now been purchased with a view to removal. The primary reason for this important step is the very heavy expense for the carriage of the pig-iron from the furnaces in Cumberland to the works here; and also what the company

in their report term the excessive railway and other charges for the conveyance of rails to the shipping ports.

All negotiations with the railway companies for lower rates having failed, the company have decided upon removal. The site at Workington is within a few miles of the hematite iron field in Cumberland. It is also situated in tide-water. Thus the company will save a large proportion of the cost of transport both of the ore and of the rails designed for foreign shipment. The amount of this saving is estimated not less than $300,000 annually—no small sum to be added to the profits of the company, and that will soon repay the cost of removal. There will then remain in Sheffield but one other firm making steel rails besides Messrs. Charles Cammell & Co., viz, Messrs. Steel, Tozer & Hampton.

The manufacture of Bessemer rails was first entered upon in Sheffield, about twenty years ago. Now very extensive mills are at work in Barrow-in-Furness, Middlesboro', and South Wales. All these are upon the sea. It seems improbable that any inland manufacture of rails, weighted with the heavy cost of transport, can successfully compete, in foreign trade, with those located upon tide-water. Whether this will eventually compel other Sheffield makers who do a foreign trade in rails to remove to the coast, time will show. One very well-known firm, that of Messrs. John Brown & Co., formerly extensively engaged in the making of steel rails, solved the problem, to their own satisfaction, some years since, by discontinuing that branch of their business. They do not see their way to resume, and do not intend to do so, unless it should appear in the future that they can compete with others in the making of steel by the Gilchrist dephosphorizing process, for which they have some superior facilities. and which is used by a company in Middlesboro' in the production of some three thousand tons weekly.

Armor-plates.—A fact or two in regard to the firm of Messrs. John Brown & Co. may be of interest, as they are so well known in the United States. They use at their Sheffield works one hundred and sixty steam-boilers, with between 11,000 and 12,000 horse-power. They have the largest planing-machine—used for finishing armor-plates—in the world. Their weekly pay-roll amounts to $35,000. They consume a quarter of a million tons of coal and coke annually. I saw, at their works, a day or two since, an armor-plate 18 inches thick, weighing 20 to 23 tons, made for the English admiralty; also several heavy beam plates for shipment to the United States. The largest plate recently rolled is for the Italian Government. It is 19 inches thick, and weighs, when finished, over 32 tons. These plates are a combination of iron and steel, the patent of Mr. Ellis, the chairman of the company.

The total weight of armor for the large Italian vessel Italia will be about 18,000 tons. In addition she will require iron deck-plates from three to four inches thick, weighing 800 or 1,000 tons. The process of handling and bending these immense armor-plates to fit every part of the ship is an interesting one; and their edges are so nicely planed that when placed in position they fit each other with the utmost exactness.

Where is the contest to cease between armor of such ponderous proportions and the heavy guns that can pierce it?

This firm illustrates the value of a name. When Sir John Brown, its founder, left the business to his successors he was paid a million dollars for good will and for the privilege of retaining the well-known title.

This firm and that of Messrs. Charles Cammell & Co. are the only makers of armor-plates in the kingdom, and it is not probable that competition will ever drive this great business from Sheffield. Since the demand must of necessity be limited, but few, even of the rich capital-

ists of England, would be willing to undertake the heavy outlay when the first cost of plant would be not less than $1,250,000.

Crucible steel.—The manufacture of crucible steel is also firmly intrenched in this its ancient home. The coal of this immediate neighborhood is said to be superior to all except that of Durham for making coke, upon which the quality of crucible steel so much depends. Again, the best clay in the kingdom for the making of crucibles for steel-melting is found near Sheffield. So much is it esteemed that it is sent to other parts of the country.

Land vs. Ocean freight.—An illustration of the cost of inland as compared with water carriage is the fact that the carriage of steel rails from Sheffield to Liverpool, seventy miles, with shippers' charges, is more than half the cost of freight across the Atlantic.

Cost of labor.—Another fact that will be of interest to our manufacturers is that the cost of labor put upon the iron ore from the time of its arrival at the works, through all the processes of converting it into steel rails, is only $1.75 per ton of rails loaded upon railway trucks ready to be taken to the port of shipment.

C. B. WEBSTER,
Consul.

UNITED STATES CONSULATE,
Sheffield, April 20, 1882.

Declared value of exports from the consular district of Sheffield to the United States during the quarter ending March 31, 1882.

	Value in U. S. gold.
Steel	$522,297 22
Iron	48 08
Spiegeleisen	30,537 30
Bessemer steel rails	568,559 50
Bessemer steel blooms	2,955 80
Steel tires	13,230 24
Steel springs	2,524 48
Iron forgings for axles	3,060 37
Steel rails	1,803 05
Anvils	1,768 57
Stove grates	319 98
Machinery	1,722 46
Cutlery	311,013 92
Files	19,433 50
Edge and other tools	13,667 99
Garden tools	3,133 28
Scythes	1,026 85
Sickles and grass hooks	1,957 87
Sheepshears	21,943 47
Electroplated, wooden, glass, and other table ware	568 70
Umbrella ribs	1,800 47
Gun furniture and shooting tackle	1,425 98
Fishing tackle	161 15
Measures and measuring tapes, and chains, rules, squares, straight-edges, &c	9,529 93
Optical goods	140 90
Surgical instruments	61 31
Magnets	557 65
Magneto-electric machines	552 69
Iron tacks	125 55
Screws	324 99
Hackle pins	64 11
Needles	57 60
Copper (plates for engraving)	3 16
Tinware (trays and waiters)	81 06
Hardware sundries	104 38
Leather goods (jewelry cases)	16 96

Dog collars	$17 51
Papier-mache goods	25 87
Brushes	5 10
Haircloth	437 98
Grindstones	1,978 34
Millstones	81 40
Scythe stones	10 11
Whetstones	11 96
Glue	12,437 41
Grease	1,502 77
Salted skins	74,837 49
Oil leather ("chamois")	58 83
Parchment	241 97
Paper	115 32
Wines	636 22
Total	1,628,678 80

AMERICAN TRADE WITH THE STRAITS SETTLEMENTS.

REPORT BY CONSUL STUDER, OF SINGAPORE.

For the past nine years I have constantly pointed out and expressed my regrets over the fact that we had *not a single American steamer* engaged in the immense carrying trade of the East. Would they pay? Some insist upon saying they would not, but I hardly ever heard of an argument as regards the "not paying" that I could not refute; and I dare say, if we had large American firms out here (but we have *none here*, and *very* few elsewhere in the East), we would soon see American steamers. Would they pay? I need only answer that the largest portion of the exports to our country from this port (and all from Penang) was carried by British steamers, of which many cleared from ports in China or Japan, for New York or Boston direct, or for ports in England, where the goods were transshipped on British transatlantic steamers. If I were a national legislator, I might dilate a little more upon the subject of "having no steamers in the Eastern carrying trade"; but as consul I can only prove by facts and figures that, in my opinion, *they would pay*, and *would have paid long ago if we only had them.*

To prove this conclusively from the records of this consulate, let me say that during the year 1879 twenty-one steamers—all British—which cleared from ports in China and Japan for *New York direct* with tea, &c., received more or less cargo here, each time enough to complete cargo, and that fifty-three steamers—all British—which cleared from Chinese ports for England received more or less cargo here for New York and Boston to be transshipped on Atlantic steamers on arrival in England.

During the year ending September 30, 1880, I find that twenty-three steamers (twenty-one British and two German) which cleared from ports in China or Japan for *New York direct* received, all more or less cargo, always enough to complete the same, at this port, and that fifty-seven steamers (fifty-five British and two German) which cleared from ports in China for ports in England, received part cargo here for transshipment in England to New York and Boston.

It seems to me very strange that American steamers should not have found any profit in the carrying trade of the great East and of so many products (required in nearly every household in our vast country) among such a fleet of steamers as just shown. Very unfortunately no one has tried whether they would pay or not, and consequently no one can tell

us whether the expenses in any or several respects for running an American steamer would be greater than those of a British steamer. Builders and owners of steamships at home are more competent to discuss that question than I am; but to me it seems that, leaving out the question of the original cost of a steamer, the expenses for running one should not exceed those of a foreign one, or in a very small degree at least.

With these preliminary remarks, I enter upon the subject of—

IMPORTS.

I cannot say that as regards the number and kinds of articles of American manufacture and production, there has been a material change since my report for 1878. Some articles never had before in this market, were imported in small consignments, as a matter of trial. I can say that a greater, more and more widening interest is felt as regards American articles of manufacture. I regret that the "Blue Book," owing to the shipments of the great majority of consignments from the United States via England (credited to Great Britain), failed to give reliable information upon the subject, but I think I can ascertain what those consignments, in the main, consisted of.

Kerosene oil, by great odds, has been the most important article of import since my last report. In fact, the importation of this great American staple article has assumed gigantic proportions in this colony against former years. Cocoanut oil, to within a few years, was used by the natives, I may say exclusively, to give them light, and the poorest among them, unable to buy oil, used "Aamar torches" (palmleaf rolled up and filled with a cheap yet fragrant rosin found in the jungle everywhere). The Europeans first introduced kerosene oil for their own use, and little by little, the number steadily and vastly increasing, the natives began to use it, and of course, they very soon learned to prefer it to cocoanut oil, since it not only gave a much better light but was cheaper—during the past two years exceedingly cheap. There remains, however, still a great number of conservatives for the cocoanut oil, because it does not explode and gives them light enough to lie down on a mat spread on the floor (their toilet for the night is soon made), and they are able to read and write all their letters, if they have any, in the day time. Those that use kerosene oil handle it very carefully; I cannot remember having heard of a single accident here, among natives, on account of explosion. In Singapore the streets and many houses near the main gas-pipes are lighted with gas, while many houses also near the gas-pipes use kerosene oil and prefer it by far to gas. In Penang they have no gas, and all public thoroughfares are lighted by kerosene lamps.

Singapore (and the whole colony) not only consuming large quantities of kerosene oil, but being the most important mart of transshipment of all Southern Asia, sends large quantities of oil to places on the coast of Sumatra (so does Penang), the west and east coast of the peninsula of Malacca, to Sarawak and Labuan, Borneo, and various islands far and near not visited by American vessels.

Looking over the records of the consulate, I find that during the year ending September 30, 1879, there were imported in nine vessels 160,262 cases, of 10 gallons each, and during the year ending September 30, 1880, again in nine, but larger vessels, 234,231 cases, also of 10 gallons each, kerosene oil from New York direct, with an average value of about $2 per case for all.

The "Blue Books" show that 70,283 cases, of 10 gallons each, value $236,000, were imported during 1878, of which 47,283 cases from America direct, and during 1879, 244,013 cases of same size, valued $475,799, of which 239,392 cases, valued $464,352, from America direct. All above shown having originally been shipped from the United States of America, we can justly claim it all.

This tells! It creates a stir, a flutter; it takes money out of the colony to the United States. Kerosene oil has brought more money to our country from this colony, during the past three years, than *all* imports taken together from the United States since Singapore became British (1819), and the prospect of more American goods finding a market here, creates, in certain quarters at least, a feeling of alarm lest countries in Europe might be affected by it.

A little over a year ago a bill was laid before the colonial legislature for the regulation of the sale of kerosene oil, of so oppressive and "overdone" a nature that if it had passed, it would have crippled the kerosene trade almost completely. The reason assigned for the drafting of such a bill was the great danger to the public arising from the presence of such a large quantity of oil, notwithstanding that all the oil imported must by law be stored in a government storehouse near the port limits, situated in an isolated place, under governmental supervision, whence supplies agreeably with the demands of local consumption, or for shipment, can be drawn in a manner well regulated by law. I am glad to say the bill, upon remonstrances by merchants, and after a little discussion on the part of the so-called "unofficial members," was withdrawn.

The unofficial members, all merchants, seeing the dangerous consequences of the passage of such a bill to the general trade of the colony, spoke against it most energetically. Not long before that, American trade and shipping had been unprecedentedly dull, and the vessels arriving from the United States with cargoes of oil, and taking back cargoes of colonial produce to the States, caused business to revive, to give it a "healthy color" again. It must be remembered that commerce in Europe at the time was very depressed and discouraging—its outlook all but encouraging—and that but for American trade there would have been general stagnation and suffering among the natives. Sensible merchants, men of enlarged views, appreciated that we were glad to forego national prejudices in order to bring about a lively reciprocal commerce between our country and this colony, in fact, the East generally. There are those who remember with pleasure the grand times in the East, when the largest fortunes were made by a greater number of persons, comparatively, before the war; when large quantities of American goods brought out in American vessels, found ready sale in preference to any other, and little or no jealousy existed among European merchants on account of it; when American vessels were chiefly manned by American citizen seaman, and many masters of vessels were the full representatives of firms vested with power to sell a cargo, or barter it for spices, gums, &c., or to purchase a cargo for owners' account, carrying with them heavy letters of credit for that purpose. Those were *great times*, *prosperous ones*, and old residents remember them with genuine pleasure; everybody was happier, and the natives better off.

AMERICAN TRADE HINDRANCES.

But to speak here, publicly, about importing any other American goods than such as are not produced in Europe, and are actually required here, is *unpopular*, and this for more than one reason. A few

weeks ago, when the colonial legislature was convened, the governor, in his opening speech, alluding to the progress in some, and drawbacks or wants in other, things in the colony, also embraced the subject of "commerce" of the three ports of Singapore, Penang, and Malacca, showing (from the Blue Book) the increase of exports to Great Britain and other countries, from the two former ports, without making allusion to the "United States of America," the principal foreign country receiving the colonial exports. But when he came to *imports*, he simply drew the attention of the legislative council to the great increase against former years of imports from the United States of America, without any further allusion to or explanation in any way upon the subject.

Shortly after, the local paper, the Daily Straits Times, had a short editorial article, evidently written for the purpose of soothing the souls of those inimical or opposed to "imports from America" (I could not conceive for what other purpose), saying that this increase of imports from America, alluded to by the governor, consisted of kerosene oil only. It is reasonably to be supposed that many of the readers of that article "slept better" after reading it.

I mention all this, the true state of affairs, for the information of all American manufacturers and merchants seeking a market here for their goods, and in justice to myself, so that in the absence of themselves or agents, if they fail to find their expectations realized, the blame may not be attached to me after my honest endeavors to promote American trade.

But there are other and essential reasons, besides opposition or indifference on the part of some to the introduction of American goods generally, why certain articles of American manufacture or production do not find a market here, and these I shall endeavor to explain as clearly as possible.

There are also merchants here, very excellent men, who, while they are very faithful British, German, French, &c., subjects, a credit to their countries, and seek to promote the interests of the same, are not so prejudiced and forgetful of their general interests, or inimical to our country, but that they would and will sell, if they find a chance, American goods, no matter what, consigned to them, and they are not afraid to admit that they entertain very friendly feelings for our country and people, as well as to express their admiration for our unexampled progress in science, inventions, manufactures, and agriculture, especially such among them as have been in the United States. I have often discussed with them the feasibility of introducing agricultural implements, edge and all kinds of mechanics' tools, blocks, labor-saving machinery, and engines, pumps, &c., just the very kind that our farmers, pioneers, sawyers, &c., use in clearing and sawing timber, handling and removing heavy objects, and ridding ground of stumps, rocks, &c.

During the past two years I received many catalogues, excellent ones among them, with price-lists from manufacturers and merchants at home, seeking a market here. Among them, some evidently labored under the opinion that I was allowed to trade or be an agent. I can say that I did all I possibly could for all of them. I answered their letters, giving such information and explanations as seemed to me to prove most valuable to them, and I can truly say I worked hard, having to go among the merchants to discuss the chances of certain goods seeking a market, or the ways and means for introducing them, making explanations to unpractical men as to the great benefits to be derived from the use of labor-saving machinery and implements, and answering all those letters, many of them necessarily at some length, besides at-

tending to the multifarious and laborious current duties caused by ships, masters and crews, exports, people calling officially for this and that, relieving destitute seamen, with all the labors pertaining thereto, &c., *ad infinitum*.

My commercial supervision, to make it valuable for our commerce, does not only embrace the territory of my consular jurisdiction, viz, "the Straits Settlements," for which I receive my salary (in fact it is the smallest portion of it), but it takes in the largest portion of Sumatra, the Malay states on the peninsula of Malacca, due north and east of this colony, nearly all under Siamese suzerainty, but bringing their products to this port and Penang, the largest portion of the coast of Borneo, and many islands in Netherlands India (really under the jurisdiction of the consul at Batavia, but bringing their products chiefly to this market), and even, in a measure, French Cochin-China, where we have no consul. To extend our commerce in the surest way, I should be able to visit at least the most important ones of these countries and islands, but I cannot, for the want of appropriations for traveling and for paying for services rendered in the consulate during my absence.

If our manufacturers and merchants came out here themselves to visit those places and demonstrate practically the usefulness and excellence of their goods, the consul assisting them in any way he can, the latter could remain at his post, and, *as it is, he has to.*

There are these drawbacks as regards steam-power, variously applied, wood-working machinery, labor-saving machinery, implements, tools, &c., viz:

First, the merchants, whether willing or unwilling to sell our goods, however accomplished, educated and brought up in the best schools in Europe, are very unpractical as regards the developing of a new country and its agriculture. If they do have nice gardens, choice flowers and plants around their habitations, and may have botanical knowledge and taste for arranging a garden, after all the work is done by native gardeners, Boyans (a Malay tribe), among whom there are very proficient ones, if they do work in a primitive, patriarchal way (some Hindoos and Chinese also); and the white planters, for whom the merchants are business agents, are really only planters by proxy, and not farmers or husbandmen, and, as a rule, are brought up in the same way and in the same schools as the merchants aforesaid, and work their plantations with droves of coolies, doing all their work with axes first and hoes after, just as it was done in the time of the patriarchs, and find their enterprises, whether for coffee, tobacco, and tapioca, &c., more or less profitable, using no plows, but, talking about labor-saving machinery and implements, never use it, nor ask for it, and would not know how to use it if they had it. There can be no demand for such goods *until Americans come among them who know how to use that kind of machinery and implements, and from whom they can learn.* If there are any planters round about here who know how to manage that kind of machinery, or use it, I have not heard of them nor seen them.

Well-illustrated catalogues are useful, since they convey more or less ideas. We see on paper a machine with wheels, cogs, and what not, and a man or men attired as mechanics, looking smart and knowing, holding on to something or at work in some way; it is all there. I may hand the catalogue to a business man, and he, holding it upside down, may pronounce it "very clever indeed," "how ingenious," &c., or a native boss may take it and hold it upside down, and may pronounce it in his native vernacular as "very fine indeed," &c., but the machine and mechanics on paper do not work, nor show what it can do, where-

in the advantages lie; such machines are in America, and so are those that know how to use them and make them, and the price-lists show the cost and percentage allowed to agents, and in this respect, manufacturers in Great Britain, or elsewhere in Europe, of the same or similar machinery are no better off than our own, or not much better off. And all this in the face of the fact that the countries and islands trading with Singapore could be made an excellent field for the use of much of the machinery, implements, and tools that seek a market here. I said this in my last report, and I can now only repeat it, but with a little more encouragement after great exertions on my part. I shall illustrate this further on.

Secondly, not only as regards machinery of various kinds, and implements, &c., but other useful articles of manufacture, the merchants tell me, "You see we have, as you know, to deal chiefly with natives as they are; with all their old usages, conservative notions, cheap and simple habits, it is difficult to show and explain to and convince them of the advantages of new goods and new inventions, and when we succeed in putting them in the notion of buying, they will ask for little and ask for long credits besides. We could and would under no condition order new or strange goods (by purchasing), but if the firm will consign to us, we will try and see what can be done, and if the article takes well, once well introduced in the market, and we are not undersold by European manufacturers, then we can send our orders, &c." That's not all; but some of the large firms, exporting colonial produce, and dealing in well-established old articles of import, often do not take the trouble nor find the time to try selling new articles, no matter where produced, consigned to them, and in the uncertainty whether such new articles will sell or not, they do not like to hire additional help. When any novel articles consigned to them do not go off readily, they send them to the auctioneer and have them sold for anything they will fetch. I have for this reason turned my attention more to wholesale firms engaged chiefly in imports and to those who retail and wholesale in bazaars, and I found this the best plan—the bazaars especially.

AMERICAN MANUFACTURERS AT FAULT.

In answering the letters of manufacturers and merchants at home seeking market here, after giving them explanations for their guidance, among which that they must consign first, if only in a small quantity to try the market, I also gave them the names of such good and reliable firms as were willing to enter into correspondence with them (generally did), and who, in my opinion, would make honest efforts to create a market for their goods, and who, a market here first established, could very probably have succeeded in extending their sale in neighboring ports or provinces.

Some firms wrote to me (some sending catalogues and others not) asking for the names of good reliable firms to whom they could consign without particularly asking whether their goods would likely find a market. I induced firms here to correspond with them.

I am very sorry to report (agreeably as informed by firms) that in several instances, merchants at home, after having been brought into correspondence with firms here through me, refused to consign goods, and would only forward open orders for "spot cash." "Of course," said the merchants concerned, "their goods may be in great demand where hey are known, but here they are not; we have to introduce them among natives, and you know what they are, and we will not run the

risk of having the goods left on our hands, if they should not take well or not so well as expected," &c. There were other firms at home seeking a market here for the sale of goods of which I entertained hopes that upon judicious introduction they would sell; and after having gone to some trouble to get them a good firm or firms that would correspond with them upon condition of consignments, informing them by letter accordingly, and the firm here also writing to them, they never even answered our letters. Such a course was neither encouraging nor judicious as a matter of commercial policy, while to me, officially or personally, it could make no difference. If they had at least written a letter stating that they would not ship goods on consignment it would have tended to satisfy the feelings of business men here, and perhaps led to some other plan. Others, again, wrote wishing me to become the agent for the sale of their goods, and after answering them that I was forbidden by law to be a merchant or agent, and giving them the names of good firms here, in lieu, they never wrote again to me nor to the parties introduced. That there is no American firm here is not my fault. I said in several reports, that there was none, and suggested that there was a paying field for one (or more) with plenty of capital.

The publications of commercial journals, periodicals, in the United States, with their good illustrations and descriptions of goods advertised for sale and of new inventions, their sensible editorials and publications of letters upon commercial subjects from all parts of the civilized world, the commercial and financial statistical tables, reports upon the state of our home markets, the progress of science, mechanical skill, arts, agriculture, &c., all very creditable to the publishers, their correspondents, and to our country, have done *any amount of good*, and are deserving of every encouragement from our fellow-citizens, and good earnest business men any and every where. I recommend, so that the burden may not fall too heavily upon publishers of such useful advertising mediums as I have just mentioned, that chambers of commerce or business men of a community, by subscription, assist in sending them to firms everywhere if the latter fail to subscribe for the same.

AMERICAN EXCHANGE WANTED AT SINGAPORE.

Right here I am aware that some merchants, planters, and private individuals, reading some of the commercial periodicals alluded to, and finding certain articles of manufacture that suited or pleased them, and not finding the same in this market, ordered them from the United States, prejudices or no prejudices against the same. Such private transactions are often the means of leading to good results. In this there is, however, one drawback experienced, namely, that the banks here do not issue drafts upon banks or firms in the United States, as a rule, and that in cases where drafts were issued, the rates of exchange charged were so high as to discourage making payments in that way, or the purchases of goods. And the rise and fall in the value of silver dollars, current almost everywhere in Southern Asia, forces banks to take large margins. I have been asked for advice on several occasions by people either wishing to order goods from the United States, or to remit for goods ordered, in what way they had best accomplish this, at as little loss as possible, and I know of no better alternative than to tell them to compound the amount of a bill for goods in United States currency into sterling drafts on London at the rate of about $4.84 to the pound sterling, and to pay to the bank issuing the draft the difference between silver and gold at the current rate (Mexican, Japan, and

Hong-Kong silver dollars being the legal-tender currency of the colony; so were our trade dollars, but they have completely disappeared). And while speaking about those silver dollars, I must say that the difference in value between a dollar of gold and one of silver is as annoying as it is injurious in its consequences—to commerce, of course, especially. Here, from one day to another, almost, the value of the dollar changes, and one does not know whether he is a gainer or loser by recent transactions.

The tillers of the soil, the working classes, people working for fixed wages, are the greatest losers by it, because through the fall in silver the cost of their living is enhanced, while there is no change in their wages, and the complaints consequently are many. This has lasted now for years, and it is surprising that the British Government is unable to find a way to put a stop to this great financial defect; and what is more surprising still is that Europeans here, when the uneducated or untutored here complain of the great depression of a dollar that was once the equal fully of gold in value and the consequent loss in a man's wealth, tell them, as a matter of fact, that the United States is the sole cause of it—owing to our very productive silver mines that our government only coins part of it, and that by far the largest portion of the products of the mines is exported to other countries, tending to keep the price of silver down, &c.

I have been told about this often, and I reply, "Yes, it is true that the United States has rich silver mines; it is also true that our government coins a certain amount of silver dollars of only 412 grains, while those you have here are of about 420 grains; it is also true that our government coins gold, that we have a bimetallic system of gold and silver, and that our dollar is worth 100 cents, while yours is only worth 90 cents, or less at times; the secret why our dollar is worth 100 cents is because our government, when it coins money, says that a coin must be worth the amount stated on its face, whether gold or silver, no difference on that account, and all you have to do is to ask your government to give you a currency that cannot be raised or lowered in value by the banks, the same as our government does, and then it does not make any difference whether we or other countries export silver or keep it at home. Do you not see that such stories as that America is the cause of depression in silver here do not hold good? Your government here tells you that certain silver dollars must be your legal tender here in payment of all debts public and private. If it has the power to make this a law, which it has, it seems to me that it should have also the power to say what it shall be worth, as compared with the pound sterling, the legal tender of England, the mother country."

A. G. STUDER,
Consul.

UNITED STATES CONSULATE,
Singapore, Straits and Settlements.

AMERICAN PORK IN FRANCE.

REPORT BY CONSUL RHODES.

I transmit herewith a slip from the Nouvelliste de Rouen of February 2—a case of litigation in reference to diseased salt pork from the United States. The particulars of the case do not possess international inter-

est to demand translation, but the publicity given thereto brings fresh before the public mind of this part of the country the alleged danger resulting from the consumption of American port. The judicial decision is based on the disease as an accepted fact, and possesses, in popular estimation, a convincing force which will be difficult to indicate.

The author of the prohibitory measure of February 18, 1881, against the admission of American meats, M. Tirard, having returned to the ministry of commerce, it is possible that the abrogation of the measure in question may be attended with more difficulty than was anticipated under the ministry of his predecessor.

The French Government is nearly as parental under the republic as it was under the empire. Long custom has made this feature a national characteristic, and the people naturally turn to the government for instruction and guidance as to proper food.

It is not the habit of the press of France to seriously examine subjects beyond national limits, and trichina in American meat was taken up and disseminated without proper discussion, and the result is that a general apprehension exists that the consumption of American pork may be attended with fatal consequences.

The exhaustive and convincing pamphlet by the Department under the title of *American pork* has served a good purpose in enlightening the agents of the government and the merchants engaged in the trade of the meat. The French importer of it, however, is as ready and willing to sell it as ever, but the consumer is not as willing to buy, and it now seems desirable to overcome his recently acquired prejudice by the promulgation of a brief, simple presentation of the case, adapted to the popular understanding. Thus, while the United States minister is endeavoring to secure the abrogation of the decree of February 18 at the foreign office, the consuls might profitably be employed in disabusing the popular mind and preparing the way for a future demand through the French press and the chamber of commerce.

ARBERT RHODES,
Consul.

UNITED STATES CONSULATE,
Rouen, France, 1882.

TRADE OF THE HAWAIIAN ISLANDS.

REPORT BY MINISTER COMLY.

The Hawaiian custom-house statistics for 1881 are not yet out in official form. One of the Saturday newspapers (11th March), however, has published from the collector-general a number of the most important tables which will appear in the official document.

I have analyzed these tables, so far as the absence of the detailed statement has permitted, and present some interesting results for the consideration of the Secretary of State. All figures are for 1881, except where otherwise stated.

Total exports from all Hawaiian ports to all countries	$6,714,726 37
Total imports into all Hawaiian ports from all countries	4,547,978 64
Value of exports over imports	2,166,747 73
Increase of exports over 1880	1,746,281 50
Increase of imports over 1880	874,710 23

Increase of imports free by treaty	$620,019 22
Increase of imports other than free by treaty	254,691 01
Increase in customs and receipts	21,010 38
Total imports from all countries	4,547,978 64
Total imports free by treaty from United States	2,646,577 12
Total imports other than from United States	1,901,401 52

This last footing includes imports from the United States other than "free by treaty," as well as from all other countries.

In order to ascertain the total imports from the United States it is necessary to analyize further. This is made difficult by the tables, which do not separate American from other imports at points other than Honolulu. The total amount of imports at all other ports than Honolulu is $71,278.13. If we call these imports all American (which they were not, though nearly so, perhaps), and if we add from another table the amount of $525,275.72 for imports specified as paying duty from the United States for the port of Honolulu, we shall then have a sum total of $3,243,130.97.

But there is still another table of "goods imported free," *not* by treaty, which does specify the country from which the imports were received. This includes animals, birds, diplomatic and other exempts, specie, &c.

The amount of specie is $236,626.55, probably nearly all on account for United States trade, though but a small proportion is United States coin. In addition to this specie the imports under this class amount to $155,277.97. Add specie to this and we have for this class of imports, total from all countries, $491,904.52.

Assuming, as in the former case, that all these imports were from the United States (which they were not), we should then have as the grand total of imports from United States, real and assumed, the sum of $3,735,035.49.

This is not very far from the actual amount, and so far as it varies from that amount it is in excess. There is no way to reach the exact amount of America imports at the Sandwich Islands, unless the collector-general will separate American from others at all the different ports, as well as at Honolulu. However, the amount of difference is material only in interfering with exact results.

It is not practicable to show upon what articles the increased imports will fall, until the detailed statement appears. The collector-general mentions an increase of 5,033 gallons in wines and spirits; an increase of 12,333 dozen in ale, beer, and porter; and an increase of 18,557 tons in merchant vessels visiting Hawaiian ports. It is gratifying to note that the United States flag covers a large majority of all vessels sailing foreign from these ports.

Total number of vessels, all nations	258
Total American	181
Leaving for all others, including Hawaiian	77
Deduct Hawaiians	20
Leaves foreigners other than United States	57
Total tonnage	159,341
United States	102,308
Other than United States	57,033
Deduct Hawaiian	5,756
Leaves	51,277

It may be of interest to note the principal articles exported to the United States, with the amount of each:

Sugar	pounds..	92,376,824
Molasses	gallons..	237,331
Paddy	pounds..	102,370
Rice	do....	6,738,500
Bananas	bunches..	20,352
Goat skins	pieces..	21,368
Hides	do....	21,972
Tallow	pounds..	118,031
Pulu	do....	2,570
Wool	do....	528,489
Betel leaves	boxes..	230
Sheep skins	pieces..	6,820
Coffee	pounds..	18,629

There were no exports to any other country than the United States with the following unimportant exceptions:

British Columbia takes 12,739 pounds of sugar; 23,988 gallons of molasses; and 50,000 pounds of rice.

Australia and New Zealand take 45,071 pounds of pulu, and 273 pounds of coffee.

China takes 302 tons of salt, and 4,282 pounds of fungus.

Pacific Islands take 3,481 pounds of sugar; 28 gallons of molasses; 4,000 pounds of rice; 29 barrels of poi; and 10 pounds of coffee.

Doubtless it is the part of wise statesmanship to consider the Hawaiian treaty of reciprocity with reference to all its relations, not only with the Sandwich Islands but with other countries possible to be brought into an American commercial system. Its influence on the carrying trade is its most gratifying feature so far developed. The country having the carrying trade of the world can dictate the world's prices and control the world's business, discriminating as it pleases.

So long as the United States pays $100,000,000 annually to foreign carriers its commerce is at their mercy, and is subject to other influences and forces than the laws of trade—production and consumption, supply and demand. It is for these reasons that this one small ascendency in the carrying trade of these islands is so simply gratifying.

There are other aspects proper to consider that are less so. As a simple financial showing the following figures are not agreeable:

Total exports of Hawaiian sugar to the United States for the year 1881 are 92,376,824 pounds. Value, at the average price of the three previous years, $6,174,000.84. Total amount of duty, at 62½ per cent. ad valorem, $3,858,750.52. Total invoice value of all imports into the Sandwich Islands from the United States for the year 1881, as made up a little in excess in the foregoing figures, $3,735,035.49:

Now, to recapitulate:

Duty lost in 1881 on sugar alone	$3,858,750 52
Total value of goods sold	3,735,035 49
Excess lost duty on sugar over total sales	123.715 03

Nor is this all. Rice and paddy, 6,840,870 pounds. Duty on same, $171,021.75.

Total of duties lost on sugar and rice in 1881, $4,029,772.27.

I have had these statistics in my hands only a part of one day, and in the unavoidable haste of these analyses may have made errors. If there are such they will be readily discovered and corrected, because the data are all right. The errors (if any) will be found in the computat ons.

The treaty should not be examined solely in relation to this financial aspect; neither should this be wholly neglected.

I have in numerous other dispatches endeavored to report accurately on *all* points, both for and against the treaty. And I will ask that the Secretary of State remember that there would not have been any such increased production of sugar in the islands except for the treaty; and that much of this increased production is the result of the capital and energy of American citizens, who are as truly and wholly our own people as the citizens of Louisiana or any other State.

JAMES M. COMLY,
Minister.

UNITED STATES LEGATION,
Honolulu, March 13, 1882.

SILVER IN CEYLON.

REPORT BY CONSUL MOREY, OF COLOMBO, ON SILVER, AND ON THE OPENING FOR AN AMERICAN BANKING HOUSE IN CEYLON.

Perhaps the subject-matter of this dispatch will be considered at the Department as beyond my province and capacity. Since, however, the bi-metallic problem is occupying a large share of public attention, and our country is in a manner pledged to the remonetization of silver, I venture to submit the following figures and observations, embodying, as they do, my own impressions, at the same time confessing that I cannot in the least pretend to expertness in such matters.

During the calendar year 1881 about $1,000,000 were expended here in sterling credits by Americans for exports to our country without any material reciprocity of trade. As there are no banking transactions conducted direct between Ceylon and the United States, those who are familiar with matters of exchange will readily perceive that that round million could only have been placed here at considerable disadvantage to the remitters. Considering, therefore, the proportions the trade to the United States has attained and the probabilities of its largely increasing, besides the rapidly developing import traffic in American goods, amounting to probably several hundred thousand dollars per annum, and liable to be much enhanced were the dealers here afforded less complicated facilities for making remittances to America. I wonder that none of our banking houses have thought it worth while to open an establishment in the island, more especially that it could now be done under the most favorable circumstances, as a large profit would probably result from the first inceptive act in this direction.

Ceylon absorbs an average of 7,000,000 rupees per annum, and the product of $1,000,000 here, provided the exchange were purchased in New York at $4.81 per pound sterling, would be £207,900, which at 1*s.* 8*d.* per rupee equals 2,546,775 rupees, or 955,040 ounces troy, which, calculated at $1.12½ per ounce, the present value, I think, of silver for recoinage in the United States, would be worth in New York $1,074,470, say a profit on the transaction of over $74,000 irrespective of ulterior results.

If these figures are correct they will also apply to the situation in India, a vast country, absorbing so much treasure that many millions of United States money, converted into sterling exchange as hereinbefore set forth, could be reconverted at such great profit into silver that I wonder some of our adventurous capitalists, independent even of banking considerations, have not ere now made a corner in rupees. They

could scarcely fail to secure a large profit, and the operation would bring New York a long step nearer her ultimate destiny, to wit, the center of the world's monetary system.

It might also prove profitable for our government to purchase some of its silver for coinage in this way, and perhaps such a move would cause such a sensation in Europe as would assist in determining the issue of the silver question.

W. MOREY,
Consul.

UNITED STATES CONSULATE,
Colombo, Ceylon, May 2, 1882.

THE BI-METALLIC STANDARD IN GERMANY.

REPORT BY CONSUL-GENERAL BREWER, OF BERLIN.

In No. 162, of the North German Gazette—here known as Prince Bismarck's organ—an editorial leader on the bi-metallic question appeared that has attracted much attention, as its author is supposed to be Mr. Von Dechend, the president of the board of the Imperial Bank.

As this article is somewhat lengthy I shall try to give only a summary of its most striking features.

The editor of the paper says the author of that article is a man pre-eminently fitted to watch over all the phases of the money market and the wants of trade, and he considers the author's "propositions for a practical solution of the standard question" important enough to make them known to all interested in economic and commercial life.

Some years ago [the author says] I had doubts as to whether or not the existing stock of gold would suffice for supplying the wants of the money circulation—wants so enormously increased owing to the depreciation of silver.

I did not believe from the very outset that the demand for coins that had, previous to the demonetization of silver, been supplied in nearly equal portions of gold and silver could be satisfied by gold alone after the silver coins, owing to the depreciation of silver, had been degraded to mere subsidiary coins. But observations since made have confirmed my belief that there is, indeed, a scarcity of gold.

The frequent disconnected or abrupt rise of discounts, the apprehensions from one sided lowering of the discounts, the mutual overbidding in the cost price of foreign gold coins, the feverish uneasiness with which every appearance likely to affect the amount of gold on hand in the respective countries was noticed, all such and other occurrences can only be explained by the real scarcity of gold.

After pointing to the scarcity of gold now prevailing in all countries, the author speaks of the suggestions which have been made by others to bring this calamity in Germany to a close.

The first proposal, to let the question of gold scarcity and its probable consequences quite alone, and to provide only for the quickest possible sale of the old thaler silver and to procure gold instead, the author rejects. If Germany could succeed in disposing of only 200,000,000 or 300,000,000 of her thaler silver she need not care for any further steps in that direction; her monetary circulation would then have nothing to desire. But, first of all, the author designates it as an error to anticipate that 200,000,000 or even 20,000,000 German marks a year would be salable.

The fact that about 400,000,000 marks of silver per year are extracted from the mines in general, does by no means admit of a conclusion that even 40,000,000 marks of German thaler silver would be salable.

While owners of mines under all circumstances are dependent on the

immediate sale of silver, and are not able to wait for better prices, the thaler silver could only be disposed of when and as far as the demand for silver had not been supplied by the mines and Indian drafts, and any attempt to get rid of German silver, without any regard to the demand, must remain without result, and can only have the effect to lower more and more the price of silver, attempts for which Germany has already paid very dear.

Even if 25,000,000 to 30,000,000 marks of silver per year might be sold by Germany, of what avail would this be, considering that the German Imperial Bank repeatedly lost in a single month more than that amount, and variations of her stock of gold of nearly 100,000,000 are recurring in almost every year.

As more effectual the author deems the proposal of the bimetallists, that all large states should have the coinage of silver free at a fixed ratio of value between gold and silver to be agreed upon.

That proposition rests on the right understanding that the existing gold scarcity is chiefly due to the depreciation of silver, which could only be done away with when the price of silver can be raised again, and as much as possible secured against variations.

The circumstance, however, that England will never accede to a double standard union, and allow the free coinage of silver, makes the second remedy useless. England would not do so, as she, in the opinion of the author, is not at liberty to expose herself to the danger, with which she would be threatened, of being overflowed by silver, and of losing her gold as a consequence thereof. Even Germany would likewise be threatened by that danger, though not to a like extent, since she already has a larger stock of silver. It cannot, he adds, fairly be expected from Germany to have the silver freely enter into circulation again, after she has sacrificed so much to get rid of it. But the author is opposed to that measure because he feels convinced that no country, not even France, or the United States, could at all times fulfill the obligation to coin any amount whatever of silver that might be brought to their mints unless provision should be made to dispose of it previously, and so the author turns to his own propositions intended to attain this object.

The author first confines his propositions to Germany because he might be better understood. By proper steps to be taken he would have the use of gold confined to international payments and the monetary trade at large, while the middle or small trade or traffic should chiefly have recurrence to silver money.

Foreign countries should, as heretofore, be held to pay Germany only in gold, and *vice versa*.

The coinage of silver should not be free. The provision of the German mint act binding the German mints to coin gold also for private persons should remain in force, as well as the liability of the Imperial Bank to exchange gold in ingots for its notes at the fixed rate of 1,392 marks per pound, troy weight, and the right of the Federal Council to withdraw silver thaler pieces from circulation, or to declare them to be subsidiary coins, should be annulled. Of course, by that means alone the object sought for by the author, to bring the use of silver more in vogue, he thinks cannot be attained.

The right of employing the thalers for payments at home still continues, and they are as fit for that purpose as gold in nearly all cases of traffic; but they are not liked for the reason only that people will not expose themselves to inconveniences and trouble inseparably connected

with the daily expected, though legal, withdrawal of the thalers from circulation.

If the use of silver, says the author, is to become general again, a certain indispensable pressure on the public should be exerted; therefore the author proposes to have gold, as well as paper currency, confined to pieces of twenty marks, and to have pieces below that amount withdrawn as speedily as possible so that only silver coins could be used in payments in less sums than twenty marks.

By thus creating space for silver coins, the author is considering the interests of Germany first. But the final object he has in view for terminating the depreciation of silver could only be attained by the cooperation of other large States, by their withdrawal of gold pieces and notes of the smaller denominations and substitute silver coins.

What effect such a measure, generally adopted, would have, the author infers from information derived from most reliable sources. For instance, he shows that in the States represented at the last Paris monetary conference—not including Austria and Russia—where the paper currency is still in force, more than 2,550,000,000 marks are circulating in gold pieces and notes of a denomination of less than twenty francs, while the total silver production of the globe per year, according to the highest estimates, does hardly exceed 400,000,000 marks.

For so much silver money, therefore, space could be created, provided those States would determine not to issue any gold coin or notes of less than twenty francs, but to withdraw all pieces of a smaller amount within a reasonable time.

As an apparent consequence of the article above referred to an "appeal" has been published in the German papers, of Mr. Von Kardorff, the renowned advocate of bimetallism in Germany, as chairman of the German club for an international double standard, which, translated into English, reads as follows, viz:

APPEAL.

The Paris monetary conference does not, as intended, meet in the month of April, 1882, but has been adjourned for an indefinite time, yet their sittings, it is reported, will be opened in the course of the current year. The prolongation of the adjournment took place partly for the purpose of gaining time for propagating bimetallic views both in Germany and England, and also for examining as to the practicability of the propositions made both by the Italian and German Governments for the solution of the standard question.

To utilize the time as fully as possible in behalf of bimetallism is an urgent duty of all friends of the double standard. If we do not succeed in establishing an understanding among the nations as to the restitution of silver then severe inevitable perils will threaten the economic development of the civilized world. The international scarcity of gold, which our adversaries pretend to be a fiction of the bimetallists, has been acknowledged to exist both by the German Government and the chief of our imperial bank, whose practice and experience warrant the correctness of his opinion; the aims of the bimetallists, for whom large part of the German press has nothing but derision, scorn, and calumny, have thus received a new and lasting indorsement.

Our object shall be to enlighten the public as to the serious consequences of a failure of the bimetallic pursuits, and to prepare the way for a universally satisfactory solution of the existing evils by consolidating monetary affairs on the bimetallic basis. Only the most active support of our endeavors in the widest circles can enable us successfully to steer our course to that great end.

All those, therefore, who understand the great import of the standard question and and who are sharers in our views, are hereby urgently called on:

1. To enroll their names on our club list as members;
2. To solicit members for our club;
3. To bring as many as possible of our publications into circulation;
4. To augment our funds for agitation by contributions of money.

Our papers, the sixth volume of which is printing, as well as the Club's Organ, appearing twice a week, will, in any number desired, be placed gratis at the disposal of our fellow-members.

The fellowship is acquired either by applying in writing to our secretary, or by remitting a contribution of at least 5 marks per year.

The GERMAN CLUB FOR INTERNATIONAL DOUBLE STANDARD.

M. S. BREWER,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
Berlin, April 24, 1882.

PRODUCTION OF SILK IN FRANCE.

REPORT BY CONSUL PEIXOTTO.

For the growing interest taken in sericulture in the United States, and especially for those who are gathering data in regard to silk produce and manufacture, the following facts concerning the past year's production in France may prove of value.

In 1881 the cocoons raised from 357,503 ounces of silk-worms' eggs amounted to 8,846,248 kilograms, or about 19,900,000 pounds. In 1880 6,488,496 kilograms were raised from 462,893 ounces of silk-worms' eggs. The product of 1881 was therefore much larger than usual.

The average per ounce was only 14 kilograms, or something over 28 pounds, in 1880, whereas it amounted to nearly 25 kilograms, or over 50 pounds, in 1881. It is important to remember this point, as it was due not only to a more favorable season but to greater care in treatment and greater success in overcoming the pestilence which for many years afflicted the silk-worm.

Taking into account the amount of eggs which completely failed, that is to say the amount of eggs which failed to develop from the beginning of the season, the result still remains favorable for the past year.

To show the proportion, it is necessary to divide the undeveloped eggs into three classes, viz: Japan race, 28,959 grams; other foreign races, 28,196 grams; native race, ancient yellow species, 31,154 grams.

By the above it will be seen that the native seed or silk-worms' eggs furnished a figure very little above the foreign.

On the other hand, it will be remarked from the following table that the home or native species were prevalent in the market over any other cocoon, and that the Japanese race, so long a staple silk-worm egg, furnished comparatively but a small part of last year's cocoonery provision.

Of the 357,503 ounces of grain or silk-worms' eggs used, the Japanese furnished 6.57 per cent.; other exotic races, 4.75 per cent.; ancient yellow species of France, 88.68 per cent. That is to say: Japan race, 23,392 ounces; other exotic races, 16,972 ounces; French species, 317,039 ounces.

Comparing this with the table of undeveloped or lost eggs, it will easily be seen that the yield of the French was vastly superior.

In general the quality of the past year's cocoons was good, and the reeling was facilitated as a result. The average return per basin or reel was 1 kilogram of silk to 12 kilograms of cocoons.

If account be taken of the cocoons reserved for cultivation, viz, 232,532 ounces, or 19,377 pounds, and estimate the quantity used for filature or reeling at 8,400,000 kilograms, the figure of 700,000 kilograms is obtained as the product of the reels, viz, 1 kilogram of silk to 12 of cocoons.

In order to compare 1881 with the preceding years, the following will suffice: The harvest of 1878 gave 608,000 kilograms; the harvest of 1879

gave 375,000 kilograms; the harvest of 1880 gave 525,000 kilograms; or an average of 502,900 kilograms per year as the product of the reels. The past year's product, being over 700,000 kilograms, was owing not only to the seasonable development of the cocoon but the greater care taken in preserving the eggs from contamination. The more science interests itself in the disease of the silk-worm the better are the results, and in this respect the labors of Pasteur, the distinguished microscopist, have unquestionably contributed to overcome the malady or epidemic so long prevalent.

In order to give a better idea of the different results obtained in developing certain quantities of cocoons from certain quantities of eggs, and also to show the amount or quantity furnished by each of the silk-producing departments of France, I beg to submit the following table showing the cocoon harvest for 1881:

Departments.	Silk-worm eggs used in cultivation.	Cocoons harvested from the same.
	Ounces.	*Kilograms.*
Ain	334	10,636
Alpes (Basses)	3,528	112,751
Alpes (Hautes)	482	18,725
Alpes (Maritimes)	964	37,264
Ardeche	83,779	2,081,749
Aude	16	645
Aveyron	303	9,268
Bouches-du-Rhone	13,586	349,281
Corse	855	35,812
Drome	59,265	1,628,197
Gard	109,485	2,326,415
Garonne (Haute)	41	8,391
Hérault	7,763	161,677
Isère	12,562	315,711
Loire	489	11,801
Lot	32	1,190
Lot-el-Garonne	1	48
Lozére	7,134	72,408
Pyrenées-Orientales	663	30,699
Rhone	204	4,920
Savoie	789	21,540
Savoie (Haute)	2	56
Tarn	672	12,739
Tarn-et-Garonne	540	12,123
Var	12,968	451,525
Vaucluse	54,014	1,580,727
	357,503	8,846,248

BENJAMIN F. PEIXOTTO,
Consul.

UNITED STATES CONSULATE,
Lyons, April 26, 1882.

FRENCH IMPORTS AND EXPORTS OF SILK.

REPORT BY CONSUL PEIXOTTO, OF LYONS.

In transmitting a tabular account and comparative tables of export and import of silk into and from France for the years 1881, '80, '79, permit me to add a few remarks on the subject. The administration of the

custom-house has just published the result of the commercial movement in France during 1881.

The figures furnished by this document are only approximate, as the valuations of stuffs and all merchandise are according to prices in 1880, and the values for 1881 could only be determined by taking the rise and fall of certain prices during that year into consideration.

As regards silk, the prices were higher during 1881 than previously. This was not only due to the elevated prices of raw material, but to the high favor fine material had been brought into.

The exportation of 1881, it will be seen, reaches within 600,000 francs, of the sum of the year 1880, and most likely in the definite table it will surpass it. (See piece goods exportation table.)

This result has been obtained in spite of a diminution in pure silk goods of 6,000,000 francs, and it is due only to the increase in mixed stuffs that the exportations of 1881 about equal those of 1880. The custom-house statistics are not in harmony with that which is known of the Lyons factories' work, the sum of their production last year being much larger than in preceding years. Nor do the custom-house statistics tally with either the information given by the assaying or condition house, or with that furnished by the dyeing establishments.

It is well known how difficult must be the valuation done by custom-house statisticians, as they can only decide on values according to experience based on the knowledge they have derived from former prices; whereas to be correct in valuation would necessitate a thorough comprehension of the changes in fashion, fluctuation of raw material, market, and other differences entailing a change or influencing the prices of goods. Undervaluation is a difficulty no one overlooks; but the home consumption of silk goods must be remembered too, for, unless this be considered, the exportation tables of silk or any staple merchandise, and the production statistics of the same, would never be made to coincide in quantity, or even attain approximate exactitude.

This year the home consumption was no doubt largely owing to rapid wealth—or, rather, rapid increase of wealth—the effect of speculation, and this state, ephemeral though it was, no doubt gave an impulse to the manufacture of the more expensive and rich materials in silk goods of all kinds. Not only have the French manufacturers derived a relative benefit from this demand for luxuries of the silk trade, but the tables of imports into France will show that foreign manufacturers were likewise favored. It would be incorrect to suppose that all the silk goods imported into France are intended for French consumption, for it is unquestionable that a great deal of merchandise of all kinds, such as silks, Vienna fancy goods, jewelry, mosaics, &c., are imported into France and sold in Paris as French goods. This is done by those firms who, having business houses in Paris, manufacture all their goods in Italy, Switzerland, Germany, and elsewhere.

No doubt this, in a measure, increases the supposed exports of France; but, on the other hand, it would be a grave error to say that the exports from France were only 234,000,000 in 1881, as this only represents the amount sent abroad by merchants, expeditors, and manufacturers. Whereas, besides the 3,840,067 francs declared by the milliners and ladies' furnishing establishments of Paris as having been exported by them, we must not forget the enormous quantity of goods that pass the ports of France unnoticed in the trunks of departing visitors from all parts of the world.

Notwithstanding these drawbacks to the attainment of exactitude, the tables of the custom-house on export and import must, nevertheless,

be valuable as containing matter of relative significance, and in comparing one year with the other.

GEORGE D. M. PEIXOTTO,
Vice-Consul.

UNITED STATES CONSULATE,
Lyons, March 12, 1882.

SILK EXPORTS OF FRANCE.

1 *a. Exportation of raw and thrown silk and cocoons from France.*

Designation.	1879.	1880.	1881.	Increase of 1881 over 1880.
	Kilograms.	*Kilograms.*	*Kilograms.*	*Kilograms.*
Cocoons	227,068	729,917	1,225,534	495,617
Raw silk	1,538,855	1,643,196	1,709,473	66,277
Thrown silk	95,356	68,265	192,054	123,789
Total	2,561,279	2,441,378	3,127,061	685,683

1 *b. Piece-goods, ribbons, &c., given in detail.*

Classification.	1879.	1880.	1881.
	Francs.	*Francs.*	*Francs.*
Pure silk plain goods	99,660,094	96,271,134	90,547,771
Mixed silks, fancy and plain	46,052,013	59,593,872	63,638,282
All kinds of ribbon	19,957,630	16,948,145	15,362,812
Miscellaneous goods	61,075,263	61,365,849	64,183,135
Total	226,745,000	234,279,000	233,732,000

Decrease in 1881, 547,000 francs.

2. *Importation of raw and thrown silk and cocoons into France.*

Designation.	1879.	1880.	1881.	Increase of 1881 over 1880.
	Kilograms.	*Kilograms.*	*Kilograms.*	*Kilograms.*
Cocoons	1,906,302	1,680,597	1,962,127	280,530
Raw silk	3,918,556	4,108,528	4,466,415	357,887
Thrown silk	872,468	962,456	1,001,651	39,195
Total	6,697,326	6,751,581	7,429,193	677,612

3. *Importation of foreign silk goods into France, in* 1879, 1880, *and* 1881.

Ribbons, piece goods, &c., given in detail in table 1 *b*.

	Francs.
1879	38,033,000
1880	42,278,000
1881	47,807,000
Increase of 1881 over 1880	5,529,000

THE WORLD'S SILK CROP FOR 1882.

(*First report.*)

REPORT OF CONSUL PEIXOTTO, OF LYONS.

I have the honor to communicate the following on the prospects of the silk crop of 1882, which may prove of interest to those interested in this industry.

FRANCE.

The breeding of silk-worms presents the most favorable indications, in spite of the rainy and cool weather of the month of April, which was unfavorable to hatching, particularly in the departments of the Ardeche and the Drome. Breedings have already reached the first, and in some places, the second moultings. The mulberry leaf is beautiful and abundant.

In the departments of the Vaucluse and the Gard the worms have attained the second moulting and progress rapidly; vegetation is superb.

In the Pyrenees the breeding of reproduction are in the third and fourth stages, and give complete satisfaction.

On the whole, the French crop promises the best results, both as to quality and quantity.

SPAIN.

Murcia.—The worms have successfully hatched, the first cocoons will appear by the 10th or 12th instant.

Valencia.—The breedings in general are excellent and have reached the fourth moultings; result promises splendidly as to quality and quantity.

Spain, as a whole, will have a fine crop.

ITALY.

Naples.—The favorable weather which succeeded the cold and rainy days of the first fortnight of April has put an end to fears and complaints.

In the Neapolitan provinces the worms are at their second and third moultings on the plains, and at the first in the mountains.

Tuscany and Romagna.—Advices are very contradictory. The damage done by the frost has been exaggerated, but exists to a certain extent. Worms are at their first moultings; breedings irregular.

Marches.—Hatchings good; abundant eggs; mulberry leaves magnificent.

Frioul.—The rainy weather has proved disastrous, and an inferior crop may be expected.

Tyrol.—Unfavorable season. Incubations greatly retarded.

Lombardy.—On account of frost and rain, a reduced crop may be anticipated. Latest advices present a somewhat more hopeful result.

Piedmont.—The fine weather which has succeeded the bad gives better prospects than were at first entertained. The worms are in their first stage and progressing favorably; the yellow breed predominates.

LEVANT.

Broussa.—Weather though clear not sufficiently warm, and the crop will be later than ordinary. In the most favored sections hatchings have only now commenced.

Syria.—The exceptional cold has greatly retarded the hatchings; the first and second stages have only been reached.

On the plains the majority of the eggs are of the Japanese breed. On the mountains, the Corsican breed predominate.

Vegetation favorable.

CHINA.

Advices from Shanghai to the 28th of April announce the crop as promising very favorable.

I shall have the honor to submit a second report on the growing silk crops next week, and complete returns at the end of the silk season.

BENJAMIN F. PEIXOTTO,
Consul.

CONSULATE OF THE UNITED STATES,
Lyons, May 3, 1882.

THE GROWING SILK CROP OF THE WORLD.

(*Second report.*)

REPORT BY CONSUL PEIXOTTO, OF LYONS.

I have the honor to report further upon the growing silk crop of 1882.

France.—The critical stage in the breeding of the silk-worm has as a rule been successfully reached, and the prospects continue to confirm a silk crop of unexceptionable quality and increased quantity.

Italy.—In Upper Piedmont in spite of adverse weather the crop has been saved. Worms are now at the second stage and progressing favorably.

In Lower Piedmont the damage done by rain and cold has been but partially repaired.

In the Milan district there is a deficiency compared with last year of from 10 to 20 per cent. As a whole the Italian crop will probably fall short from 20 to 25 per cent.

Spain.—The récolte is terminated on the plains and so far generally advanced as to warrant the statement of a largely superior harvest both in quantity and quality over 1881.

Levant.—Still backward, but no serious damage reported; in quantity the crop will undoubtedly be smaller.

China.—Crop estimated at 70,000 to 75,000 bales. Good weather has recently favored cultivation.

General résumé.—The uncertainty attending the crop in Europe has increased by the unfavorable weather of the past fortnight leaving in considerable doubt the general result. From the latest advices I am inclined to believe the general crop will be inferior as to quantity.

BEN. F. PEIXOTTO,
Consul.

UNITED STATES CONSULATE,
Lyons, May 25, 1882.

THE CONSUMPTION OF SILK IN EUROPE.

REPORT BY CONSUL PEIXOTTO, OF LYONS.

Judging by the amount of thrown silk conditioned in the assaying houses of Europe, the consumption of silk in 1881 was 19.20 per cent. larger than in 1880, or an increase in kilograms of 1,397,037.

For example the amount conditioned in—

	Kilograms.
1881 was	8,594,023
1880 was	7,196,986
Increase for 1881	1,397,037

If it be considered that speculation (frequently the case heretofore) had no bearing upon these figures, that the amount of raw silk is not counted, that the quantity of dyed goods was increased rather than diminished, and finally, that the stocks of raw silks held by manufacturers were rarely more reduced, it will not be difficult to conclude that the actual consumption in Europe for 1881 surpassed that of 1880 by fully 20 per cent.

The following table will show in what measure different European countries have competed in this increase:

Countries.	1880.	1881.	Increase.	
	Kilograms.	*Kilograms.*	*Kilograms.*	*Per cent.*
France	3,281,754	3,654,733	372,979	11.3
Germany	622,288	791,888	169,600	27.2
Austria	95,614	121,275	25,661	26.7
Italy	2,374,004	2,826,323	452,319	19.0
Switzerland	784,737	1,157,052	372,915	47.5
Great Britain	38,589	42,152	3,563	9.1
Total	7,196,986	8,594,023	1,397,037	19.20

B. F. PEIXOTTO,
Consul.

UNITED STATES CONSULATE,
Lyons, May 4, 1882.

SILK CONSUMPTION AND PRODUCTION IN FRANCE.

REPORT BY CONSUL PEIXOTTO, OF LYONS.

The financial events of the past year, and the crisis in money matters, will lend interest to the question of what formed the silk provision of France in 1881.

The silk used in France is furnished from two sources, *i. e.*, native and imported produce, and the latter forms the greater portion used, it being somewhat cheaper, and answering certain purposes as well as French silk.

The cocoon harvest in 1881 realized 8,846,248 kilograms of fresh cocoons, 8,400,000 kilograms of which, reserved for filature (or reeling), produced 700,000 kilograms of silk.

This is ascertained in estimating 12 kilograms of fresh cocoons to one of silk (that is to say, it takes 12 kilograms of fresh cocoons to make one

kilogram of reeled silk); the cocoons not being used till dry, and three kilograms of fresh cocoons amounting to about one of dry cocoons, the mean average lying between 4 and 5 kilograms.

The foreign importation of cocoons was given in dispatch No. 220 from this consulate (dated March 12, 1882).*

From that dispatch it will be seen that 1,961,127 kilograms were imported into France, and that the export was 1,225,534 kilograms, leaving 735,593 kilograms on hand.

It will be seen also that there remained in France, 1st, 2,756,942 kilograms of raw silk; 2d, 809,597 kilograms of thrown silk (after deducting the re-exportations); in total, 3,566,539 kilograms, or about 7,133,078 pounds.

To these figures must be added the silk produced from cocoons imported from abroad, the amount of which was (after re-exportation) still 735,593 kilograms, and the which being dry cocoons produced 147,900 kilograms of silk, *i. e.*, estimating 5 kilograms of dry cocoons to the kilogram of silk. The best dry cocoons give 3.59 kilograms to one kilogram of silk.

The provision of silk in France may be estimated at about 4,413,539 kilograms, divided as follows: 147,000 kilograms derived from imported cocoons; 700,000 kilograms derived from home-raised cocoons; 3,566,539 kilograms of raw and thrown silk imported. Total, 4,413,539 kilograms, or about 8,827,078 pounds.

The same calculation in former years produced the results shown in table No. 1 given below.

It will be seen that the quantity of silk offered in the French market in 1881 had increased over that of 1880, and over the average for the years of 1873 to 1880, which average was 4,250,000 kilograms.

Stocks are not, however, larger at this time than at the same time in preceding years, and this is due to the change in consumption which was incontestably larger in 1881 than in 1880.

It is impossible to give the exact figures as to the consumption of silk in France, but this may be very nearly estimated by the exhibits of the different condition houses in so far as thrown silk is concerned, and fairly estimate the amount otherwise consumed by manufactures, thus giving a pretty clear insight into the tendency of the trade, as to its increase or otherwise.

The French condition houses enregistered in 1880 trams and organzines to the amount of 3,281,754 kilograms. In 1881 the amount was 3,654,733 kilograms.

A detail statement will be found in table No. 2.

As will be seen there is an increase in the consumption, and this increase is about the same as that of the provision.

The provision in 1880 was 3,717,000 kilograms, in 1881 it increased to 4,074,000 kilograms, or 9½ per cent.

The movement of the condition houses was 3,281,754 kilograms in 1880, and 3,654,733 kilograms in 1881, an augmentation of 372,777 kilograms, or 11⅓ per cent.

By reference to table 3 will be seen a comparison of silk produced and silk conditioned since 1873.

It will be remarked that the figures of the condition are inferior to the column of provisions, but this is explained by the fact that only thrown silk is received and conditioned, and that no account is taken of the raw silk consumed by the factories nor of the very considerable quantities of thrown silk purchased at Milan and Turin, and which is

*See page 190.

not enregistered by the condition house of Lyons, having already passed those of the above-named cities.

BENJ. F. PEIXOTTO,
Consul.

UNITED STATES CONSULATE,
Lyons, April 18, 1882.

Provision of silk in France, 1873–1880.

Year.	French silk.	Imported silk.	Total.
	Kilograms.	*Kilograms.*	*Kilograms.*
1873	549, 000	3, 138, 000	3, 677, 000
1874	731, 000	4, 263, 000	4, 994, 000
1875	731, 000	3, 993, 000	4, 724, 000
1876	155, 000	5, 286, 000	5, 441, 000
1877	872, 000	1, 949, 000	2, 821, 000
1878	608, 000	3, 974, 000	4, 582, 000
1879	375, 000	3, 342, 000	3, 717, 000
1880	525, 000	3, 549, 000	4, 074, 000
Average per year	555, 750	3, 693, 000	4, 248, 750

Raw silk conditioned in France, 1880–1881.

ORGANZINES AND TRAMS.

Condition house at—	1880.	1881.
	Kilograms.	*Kilograms.*
Amiens	1, 401	3, 587
Aubenas	113, 459	114, 589
Avignon	131, 616	139, 279
Lyons	2, 207, 096	2, 481, 370
Nimes	2, 243	1, 952
Paris	205, 919	215, 064
Privas	21, 168	20, 356
Roubaix	3, 997	9, 445
St. Etienne	568, 845	642, 850
Valence	26, 010	26, 241
Total kilograms	3, 281, 754	3, 654, 733

The provision of and conditioned silk of France, 1873–1881.

Year.	Provision of silk.	Conditioned silk.
	Kilograms.	*Kilograms.*
1873	3, 677, 000	2, 658, 000
1874	4, 994, 000	3, 177, 000
1875	4, 724, 000	3, 913, 000
1876	5, 441, 000	4, 523, 000
1877	2, 821, 000	2, 610, 000
1878	4, 582, 000	3, 373, 000
1879	3, 717, 000	3, 221, 000
1880	4, 074, 000	3, 282, 000
1881	4, 413, 000	3, 655, 000

COTTON MANUFACTURES IN SWITZERLAND.

REPORT BY CONSUL MASON OF BASLE.

I have the honor to submit herewith a report of the cotton manufacturers of this district as required by the circular of the Secretary of State, dated 20th December, 1881, and which was received at this consulate on the 19th of April, 1882.

As there are in this consular district no woolen or worsted mills of any importance, and no weaving of cotton fabrics, the accompanying report is confined to the various processes pertaining to spinning and to a general statement of the comparative qualities and condition of American, Egyptian, Levantine, and Indian cottons, which are imported for manufacture in this country.

The specimens of damaged American cotton and samples of yarn in cops and skeins, manufactured in the mills at Felsenau, which are alluded to in the accompanying report, are forwarded separately, by reason of their bulk, and will reach the Department by the government mail via Hamburgh.

There are in Switzerland, according to the most recent statistics 140 cotton mills, which have an aggregate of 1,854,091 spindles. This is an average of 675 spindles to every 1,000 of the entire population of the country as against 218 spindles to each 1,000 inhabitants in the United States. These mills consume yearly from 100,000 to 120,000 bales of cotton, of which about three-fifths or from 60,000 to 80,000 bales come from the cotton fields of the United States. The cotton manufacturers of Switzerland are confined mainly to the northeastern cantons, only five out of the whole number of mills being located in the district of Basle, although cotton manufacturers residing in Basle City, and having their offices here, own and operate extensive mills in the Wiesenthal, which is across the Rhine in the Grand Duchy of Baden.

The oldest cotton mill in Switzerland is at Neue Welt, near Basle, and was established in 1823. The gradual but sturdy growth of that branch of manufacture will be indicated by the import of the raw cotton, which in 1857 amounted to 22,253,400 pounds, and in 1879 had increased to 46,333,000 pounds.

The present consumption of raw staple in this country and the relation of import to export in the various classes of cotton manufactures will be shown by the following table, which is based upon the average yearly import and export in each class during the four years, 1877 to 1880, inclusive:

	Imported.	Exported.
	Pounds.	*Pounds.*
Raw cotton	39,960,400	577,400
Cotton waste	2,688,200	2,604,200
Cotton yarn, raw, in skeins	1,398,200	12,186,400
Cotton yarn, bleached or colored, spools or skeins	1,008,800	774,400
Cotton cloths (tissues) raw	3,171,200	6,678,200
Cotton batting	9,400	59,800
Cotton tissues, bleached, colored, or printed	3,593,000	16,953,000
Cotton ribbons, braid, &c	122,000	64,600
Cotton blankets	66,400	18,400
Embroideries, handkerchiefs, tulle, muslins, gauze	48,800	3,252,800

The manufacture of embroideries in Switzerland employs more than 50,000 persons, who produce $12,000,000 worth of goods annually, and receive $9,000,000 in wages. The cotton-spinning industry employs 15,000 operatives, who earn $2,000,000 annually. Cotton weaving, dyeing, and printing give employment to 17,000 working people, whose aggregate annual earnings are estimated at $1,833,500. Cotton is also largely used in combination with silk in the manufacture of ribbons by the great ribbon weavers in the district of Basle, who, with a silk warp and cotton woof, produce not only plain *moiré* satin and faille qualities, but figured ribbons of great beauty and durability. So perfect is the process of weaving that the cotton is perfectly concealed, and the warp so thoroughly *kept on the outside* that the ribbon appears to be made wholly of silk. For this purpose very fine and evenly-spun cotton yarns are required, the qualities used being both spun and purchased largely, either in Manchester at first hands or from the agents of English cotton spinners who are established in Basle. The raw cotton consumed in Switzerland is purchased in the open market at Liverpool, Havre, and Bremen, or imported direct from the United States through the ports of Havre, Rotterdam, Antwerp, and Genoa. The opening of the St. Gothard Railway route on the 21st of this month will bring Switzerland into new and more direct relations with the port of Genoa, and thus secure an advantageous seaport for the export and import of heavy American freights.

THE PURITY OF AMERICAN COTTON.

The evidence obtained as to the cleanliness and purity of American cotton, as compared with the raw Egyptian, Byzantine, and East Indian staples, is somewhat conflicting, but a comparison of all the testimony leads to the following conclusions:

All the spinners who have been consulted agree that American cotton spins more freely and easily than any other, and is to that extent preferable. At the largest mill in Switzerland it is stated that the inferior qualities of American cotton nearly always contain sand in greater or less proportion, but only rarely in sufficient quantities to justify the suspicion that it has been purposely adulterated. In 1881 two hundred bales of good middling Georgia upland were found to be heavily sanded, the proportion in some bales being as high as 12 per cent. This sand was so evenly distributed through the entire mass of each bale that it could not be detected except during the processes of manufacture, when it appeared in the refuse thrown off by the opening and picking machinery. What seemed to confirm the suspicion of intentional adulteration in this case was the fact that the sand was not the ordinary earth of a cotton field, or the dust of a gin-house or packing-room, but clean, heavy, sharp sand, apparently selected for the purpose. This, however, was an extreme and exceptional case. Other manufacturers assert that they not unfrequently find in bales of American cotton layers or strata of cotton seeds, which are apparently the result of carelessness in ginning and packing.

Notwithstanding these occasional defects, it appears that in point of cleanliness American cotton ranks among the best, and contains far less than Egyptian or East Indian cotton of the dried leaves and seed-hulls which, from the dry climate of those countries, adhere to the cotton in the process of picking.

In respect to total loss of weight during the processes of manufacture, the best grades of raw cottons from different countries rank as follows:

	Per cent.
American loses	4 to 5
Egyptian loses	5 to 6
Levantine loses	5 to 6
East Indian loses	6 to 7

No evidence can be found to justify a belief that any American cotton manufactured in this district is purposely watered to increase its weight. In frequent instances, small quantities are found damp and caked, but these are uniformly near the surface of the bale, and are apparently due to accidental wetting from the outside during storage or transportation. In some cases this dampness has been sufficient to cause "caking" and discoloration, in which case the affected parts of the bale have of course to be rejected. Several samples of this caked and discolored cotton, found on May 6, in a bale of Texas middling cotton, opened at the mills of Messrs. Sarasin & Heussler, of this city, are included among the inclosures with this report. The pieces submitted were found near the end of the bale, and are so musty that it is difficult to decide by taste whether the dampness was caused by salt water or not, though the otherwise good condition of the bale would suggest that the trouble resulted from bilge water during transportation. But while the most careful observation in this district fails to develop any evidence to sustain the charges made by some English spinners, of willful and fraudulent wetting and sanding of American cotton, there is one other defect nearly as fatal, which is common to all grades of cotton brought to this market from the United States. This is the inexcusable slovenliness with which it is packed, and the ragged, dirty, disreputable appearance which makes a bale of American cotton distinguishable from every other in a warehouse where cotton of different nationalities is stored. It is humiliating to an American to see the awkward, misshapen bales from our vast cotton-fields contrasted with the neat, compact, uniform packages from Egypt, and particularly India, both of which are otherwise so inferior to our own in the construction and uses of machinery. But while the Egyptian and Surah bales are square, clean, uniform in size and weight, sheathed with fine, strong, hempen and jute cloth, and securely bound with rope or iron bands six inches apart, the American bale is a picture of ragged and unkempt shabbiness. From one to three or four of its broad but insecurely-jointed iron bands are usually broken and gone, one end bulges with corpulence, while the other tapers to the shape of a stumpy cigar, and the coarse, dirty stuff, like cocoa-matting, with which it is encased is broken and torn in a dozen places, through which exude trailing wads of cotton, soaked and grimy with water and dirt. The bales vary from 10 to 80 or 90 pounds in weight, and are often so poorly secured that they must be handled with the greatest care to be kept together from the railway station to the mill. No one can correctly estimate how far American cotton has been prejudiced in European markets by these superficial and needless defects, but the loss from this cause has been very large. One leading mill in this vicinity, which last year and previously used almost exclusively American cotton, now consumes very little, its managers preferring the Surah and Egyptian staples by rea-

son of their better packing and condition. If American cotton cannot be properly baled on the plantations where it is grown, it should be opened and repacked at the ports of shipment, as is done in India and the Levant. Dealers also complain that bales often bear but one mark, and that being frequently on the under side of the bale, as it arrives by rail, the mark is sometimes so worn off and obliterated as to be difficult to identify at the market of final destination. Of course this is mainly due to careless stowing or transport, but it is suggested, as an easy remedy, that each bale should bear duplicate marks upon different sides.

COTTON MILL AT FELSENAU.

Of the fine spinning establishments in the consular district of Basle, the largest is the Actienspinnerei at Felsenau, which may be considered the representative cotton mill of Switzerland. It is the property of a stock company, and was completed in 1875, the expensive buildings and machinery of the company, on the same site, having been destroyed by fire in 1872. It is, therefore, a modern factory in the highest sense of the term, its buildings and machinery being constructed and arranged by experienced managers upon the latest and most improved principles. Its machinery was built by the Alsatian Machinery Association at Mülhausen, and has a capacity of 50,480 spindles. The following facts and statistics have been kindly furnished to this consulate by M. Werder, managing director of the company:

Location: Felsenau, Canton Berne, Switzerland; area of land occupied, 1,250,743 square feet; original cost of land, $44,390; present value about the same; area of floor surface of buildings occupied, 153,868 square feet; cost of the buildings, $150,154.

Machinery in use: Openers, pickers, rotary and flat carding machines, drawing frames, slubbing frames, intermediates, roving frames, combing frames, spinning frames, reels, all built by the Alsatian Machinery Association at Mülhausen. Present cost value of machinery, $482,500; present taxable valuation of plant, $632,654; amount of taxes paid, 7¼ per cent. of profits; average rate of interest on borrowed capital, 5½ per cent.; considered satisfactory return on invested capital, 6 per cent., with proportional allowance for depreciation of machinery; motor, water wheels of 2,000 horsepower; cost of water-power plant, $86,850.

Cost of coal (from Sarbrück or from Belgium), delivered at the mill, $5.79 per ton of 2,240 pounds; total number of persons employed, 400; hours of labor per week, 65; total amount of wages paid per week, $1,158; cost of cotton mill at Felsenau fully equipped, including 87 tenement houses for operatives, $926,400; number of spindles, 50,480.

Grades of yarn spun, all numbers from 10 to 100; goods manufactured include cotton yarns for wearing, embroidery, and thread manufacture, 70 per cent. of product is used in Switzerland; 30 per cent. is exported, principally to Germany.

Mode of packing, cops in cases of 200 and 400 pounds; skeins in bundles of 10 English pounds (samples of both cops and skeins are inclosed as supplements to this report).

The cost of transportation of cotton from place of growth to the mill varies from $1.54 to $2.30 per 100 pounds.

Wages paid to operatives at Felsenau: Overseers, per week, $4.80 to $8.40; spinners, per week, $3.40 to $3.90; helpers, per week, $3 to $3.36; average weekly earnings of all classes of operatives, $2.89.

Wages paid by other cotton manufacturers in the district of Basle: Class 1. Miners (women), per week, $2.88. Class 2. Blowing-room hands (women), per week, $1.74. Class 2. Blowing-room hands (men), per week, $2.64. Class 3. Carding-room hands, *a*, card-cleaners, $2.44 to $2.28; *b*, grinders, $3.42. Class 4. Drawing, slubbing, intermediate, and roving hands (women), $1.86 to $2.50. Class 5. Spinners, men, $3.60; boys, $2.16; small boys, 12 cents per day of 6 hours. Class 6. Winding hands, $2.16 to $2.40.

In the latter schedule above, classes 1, 2, and 3 are paid by the day or week; classes 4, 5, and 6 are paid by weight of material worked, and the figures given represent their average weekly earnings; class 6 (winding hands), are generally married women, who are not held to strict hours of service, but are free to devote part of their time to domestic duties.

Cost of the necessaries of life in Switzerland.

Bread	per pound..	$0 08
Flour	do....	6
Cheese	do....	20
Wine	per quart..	12
Fresh beef	per pound..	17 to 18
Bacon	do....	20
Hams	do....	25
Potatoes	per bushel..	60 to 75
[illegible]	per pound..	5 to 6

Eggs	per dozen..	$0 20
Butter	per pound..	20
Milk	per quart..	5
Sugar	per pound..	9
Tea	do....	1 00
Coffee		15 to 30
Beer	per quart..	8
Petroleum	do....	5
Candles	per pound..	13
Soap	do....	7
Salt	do....	2

FRANK H. MASON,
Consul.

UNITED STATES CONSULATE,
Basle, May 10, 1882.

COTTON-GOODS TRADE OF JAPAN.

REPORT BY CONSUL-GENERAL VAN BUREN, OF KANAGAWA.

Since making my former report on the cotton trade of Japan, I have prosecuted some further inquiries as to the Indian cotton yarn which is held in so much favor in the east.

Through the kindness of Mr. J. Eduljee, a very intelligent merchant from Bombay doing business at this port, I have been furnished with a specimen of the yarn and cloth so largely used by the Japanese, and with a number of facts in connection with the trade that may prove of interest to our home manufacturers.

The India yarns bought here vary in numbers from 8 to 24. The greatest demand is for numbers 16 and 20—used in making cloth. Numbers 20 to 24 are found better suited for finer work and for mixing with silk. Numbers 8, 10, 12, and 14 are used for stockings and "obis" (the cloth worn around the waist by Japanese women). "Doubling," used for sewing, is made by twisting two or three threads, and is worth here about $32.50 per 100 catties (133 pounds).

This yarn and cloth come from Bombay, Madras, and Calcutta. The cloth is unbleached, very soft, and comes in pieces of 4, 6, and 8 pounds weight. The four-pound pieces, containing enough for four Japanese dresses, are mostly in demand. The yarn comes in bundles made up into bales, each bale weighing 400 pounds.

The price of number 16 is $27.50 per 100 catties, and of number 20, $28.50 per 100 catties. The "mule" yarn is very soft. "Water" is a little harder and twisted. The "mule" is much preferred in Osaka, where large looms are at work. "Water" is in demand in Tokio and vicinity. The softer the yarn the easier the dye and the less expensive. In Osaka the woof of the cloth is usually made of English yarn and the warp of India. The vast majority of yarn brought to this market is India, full 80 per cent. of the whole.

In Hong-Kong from 15,000 to 20,000 bales per month of this yarn are disposed of. Mr. Eduljee informs me that last year he himself sold here about 3,000 bales; this year, so far, 1,500 bales, and he estimates that his sales for the current year will be over 5,000 or 6,000 bales. The demand is constantly and largely increasing. As near as can be ascertained, about 12,000 bales of India yarn in all were sold in Japan last year. This year it is expected to exceed 15,000 bales. The sale of cloth is, of course, much more limited.

As a specimen of the enterprise of the Indian merchants in China and Japan, I send you herewith a pamphlet printed in English, with Japanese translation, furnished me by Mr. Eduljee, being an address delivered by Prof. W. Thompson, an English savant, before the Society of Arts in England, some years since. It has been reprinted from the columns of the Scientific American, appearing, as it did, in supplement No. 80 of that valuable journal of the 14th of January, 1877. This learned and remarkable paper is entitled "The Sizing of Cotton Goods," and is an elaborate defense and commendation of that practice, and it will be admitted that not a little ingenuity is shown by these merchants in circulating such a paper among the Japanese in their own language.

The author, after describing the process of weaving, says:

It will now be observed that the wear and tear on the warp by the pulling action of the healds, &c., is very great, and the process, which was first introduced with the view of increasing the strength of the warp, was called "sizing." The sizing process, which was at first employed, was simply to pass the threads of the warp through some adhesive matter, such as flour paste and drying it. This gave the extra strength required for the warp to pass through the loom, but it made the cloth produced feel harsh. Tallow, or oil, was then boiled with the flour or starch paste, to give it the desired softness, and this mixture gives all that could be desired for the absolute manufacture of the fabric; but here the process of sizing did not end, &c.

Again, after referring to the prejudices formerly existing in England against writing paper containing plaster of Paris and other mineral substances, when the government, in its contracts for paper, insisted that it should be "pure paper," that is, made from pure vegetable pulp, free from adulteration, until it was found that the "adulterated paper" was so infinitely superior, for the purposes for which it was destined, than the soft, porous, pure paper, he adds:

We have now, in this respect, got so far over our prejudice that we are content to read the news of the day, which has been virtually printed upon sheets of China clay or plaster of Paris. The end justifying the means, we are a clean people, and we wash our linen before we wear it; we object to wear garments, half of which are composed of China clay, flour, and tallow, or other things; and our manufacturers are quite pleased to supply us with pure cloth. The lower classes of India and other foreign countries prefer to wear China clay and tallow as well as cotton, and our generous manufacturers are pleased to comply with their demands.

A short time ago an illustrious Lancashire divine, ever ready with his pen and tongue to correct the faults and sins of his people, attacked our unfortunate gray-cloth manufacturers and denounced their practice of sizing as against all the laws of the Bible; but, from observation, I have come to the conclusion that even that gentleman prefers to wear starched linen to the pure fabric, and sometimes, therefore, prefers precept to example.

One of the chief purposes attained in sizing is contended by Professor Thompson to be the prevention of mildew, which he elaborates at considerable length. The paper, as I have before said, is a valuable one, dealing with the subject, as it does, from a scientific as well as a practical point of view.

At the present time it seems almost a waste of labor to be writing of the cotton-goods trade of Japan, as, owing to the frequent and very great variations in the value of the national currency and its depressed condition, and, in consequence, the general stagnation of trade here, there are estimated to be at present locked up in go-downs (store-houses) in the empire, for delivery in the hands of foreigners, some 12,000 bales of cotton yarn, valued at $1,200,000. This yarn was brought here on contracts of sale, delivery and pay to take place on arrival.

Acceptance, however, has been refused, and this large amount is held here at expense of interest, rent, and insurance.

I forward herewith samples of the India "mule" yarn, doubling, and cloth above referred to.

THOS. B. VAN BUREN,
Consul-General.

U. S. CONSULATE,
Kanagawa, March 28, 1882.

NOTE.—The samples referred to in Consul-General Van Buren's report may be seen at the Department of State.

THE INDUSTRIES OF AUGSBURG, BAVARIA.

REPORT BY CONSUL AGENT OBERMAYER.

Cotton spinning.—Such a short time has elapsed since the introduction of the new German duties of entry, that it is difficult to judge of the effect of them on the different industries of this country. The prosperity or non-prosperity of many industrial branches does not depend exclusively on higher or lower duties. There are, apart from these, many other reasons, particularly the fluctuation in the prices of the raw material, which often must be obtained entirely from foreign countries, and the more or less successful use made of these is at least of the same degree of importance.

With special reference to cotton spinning it may be said, without fear of contradiction, that it has greatly improved in the last year.

In this district more than 500,000 spindles are running, the product of which finds a prompt sale.

The wages show no considerable change, and the relations between the mill-owners and the workmen are satisfactory. The offer of work surpassed the demand, and this circumstance may have contributed in great part to this state of things. About the "accident insurance law" brought forward by the German Government, the proceedings are still pending, yet, in this country, the general opinion, and as far as I know for good reasons, is that the state, as such, never will be able to grant to disabled or invalid workmen the same advantages which are already offered to them at the present time by the pension and sick funds introduced in Bavaria. Public opinion on the proposed invalid and provident fund for old workmen is still more decidedly against it from the same motives.

Cotton weaving.—The improvement in the state of this branch is of less significance, and may be attributed solely to the fact that, in consequence of the last crop being a good one, our rural population is in a better position to expend money on articles of dress. This is evident from the circumstance that factories for printed and plain cotton goods have had a larger share of orders to execute.

Thread manufacture.—This branch shows an increase of several establishments during the last few years, from which it may be concluded that it flourishes, notwithstanding the great competition it has to overcome, partly from Alsace and partly from England, the fabrics of the latter being in high favor with the public. Besides the home consumption, the exportation of thread has increased, Italy and Spain being good customers for the article.

Carded wool spinning.—Although there is a very large establishment of this kind here, perhaps the largest in Germany, it is not possible to obtain reliable information about the business it does. From the fact that no complaints are heard, it may be inferred that the trade is going on satisfactorily. A great part of the raw material for this branch of

manufacture is imported from foreign countries, particularly from England.

It is, therefore, not possible to form an estimate of the extent of business in this line, nor of the hemp and linen industry, which also receives a considerable part of the raw material from Italy. The manufacture of pack thread, twine, &c., has greatly developed, and is exported as far as California, the quality being universally acknowledged as very superior.

Twisting and dyeing silks.—There exists here a large establishment devoted to this industry which does a good business in consequence of the peculiar colors used, the preparing of which is a special secret of this establishment; so that for several kinds of silk there is no competition.

Spings and saws for watches.—This branch, which is well represented here, exports very considerable quantities, particularly to the United States and Russia, because a great number of good skilled workmen in this difficult manufacture are employed by the makers. Lately a large trade with Australia has been developed.

Machinery.—This manufacture has been flourishing here in many large and small factories for a number of years. Except the building of ships and locomotives, all kinds of machines are made here. Some of these establishments which cultivate specialties, for instance, the making of agricultural machines and stationary engines, are enjoying a wide reputation, and distance the English competition. They also excel in the construction of turbines and of heating apparatus by water and by steam. The manufacture of fine brass wire for paper-makers has also obtained a very high degree of excellence; and last, though in fact first, we must mention the construction of steam-presses for printers, which are furnished in a style unsurpassed by any other German factory, and so renowned that the demand exceeds the supply.

Paper.—The mills of this district manufacture scarcely any paper except for printing and packing purposes, but this to a large extent, the produce being used mostly in this country. For better and fine notepapers the factories in Rhenish Prussia forbid all competition.

Matches.—For the production of this article there is here a very considerable factory for common phosphorous as well as for Swedish matches. Bavaria furnishes for this fabrication the most perfect wood material in any quantity. Matches are largely exported from here to Australia, China, and Japan, but the high railway freights are continually complained of.

Tobacco.—The fabrication of tobacco for smoking in our district is represented only by a few inconsiderable establishments. On the other hand, thepreparation of snuff takes a high rank, as many large establishments manufacture it. The export is very small, but the home consumption includes all parts of Germany.

MAX OBERMAYER,
Agent.

UNITED STATES CONSULAR AGENCY,
Augsburg, Bavaria, February 23, 1882.

WOOL EXPORT OF THE PROVINCE OF BUENOS AYRES.

REPORT BY CONSUL BAKER.

The wool clip of the province of Buenos Ayres, the great center of this industry in the Argentine Republic, for 1881–'82, is now nearly all marketed, and according to published tables—not, however, official—

the total amount exported up to the 1st of April was 198,914 bales, against 120,899 up to the same time in the year 1881; 186,768 in the year 1880; 159,258 in the year 1879, and 169,624 in the year 1878.

It is estimated that there are yet about 40,000 bales of the clip remaining to be shipped during the next seven months, which will place the entire export of wool from this port for the year at 238,914 bales, the largest yield which this province has ever given. In 1881, the export amounted to 211,978 bales; in 1880, to 219,614 bales; in 1879, to 208,900, and in 1878, to 216,512 bales.

The following table shows the markets to which the wools, up to date, have been shipped during this and the last season—

Country.	1881.	1882.
	Bales.	*Bales.*
France	49,502	82,083
Belgium	54,276	84,151
England	153	2,733
Germany	8,974	21,876
Italy	6,911	7,163
United States	1,082	1,248
Other countries	1	160
Total	120,899	198,914

It will be observed that a very large proportion of the wools of Buenos Ayres is now shipped direct to Belgium and France.

I may remark that the sheep of this province are merinos (Negritas and Rambouillets) of very fine qualities, but the wool all goes forwarded unwashed, nearly two-thirds being dirt; but it is cheaper to pay freight on the dirt than to have the wool washed in this country. The quotations during the season have been about as follows:

	Per aroba of 25 pounds.
Superior qualities	$3 50 to $4 20
Good qualities	3 12 to 3 70
Middling qualities	2 90 to 3 45
General qualities	2 70 to 3 25
Bad qualities	2 60 to 2 80
Lambs qualities	2 40 to 3 60

The demand has been fairly active for good and superior kinds, but the price is not so good as it was during the previous season.

The wools included in the above quotations find a market only in very limited quantities in the United States, owing to our tariff on merino wools, which is 10 cents per pound, and 11 per cent. on the value at the last port of export, provided it does not exceed 32 cents per pound; and 12 per pound and 10 per cent. on the value where it exceeds 32 cents per pound.

About the only wools from the Argentine Republic which can profitably be shipped to the United States are the coarse carpet wools of the province of Cordoba, not included in the above table of exports, which are shipped directly from the port of Rossario, on the Panama River, and mostly find a market in Boston. Our tariff on these wools is 3 cents per pound, where the value at the last port of shipment is not more than 12 cents per pound, and 6 cents per pound where the value is greater.

It is estimated, owing to the opening of new camps in the southern frontiers of this province, that the number of sheep in the Argentine Republic has increased 30 per cent. since last year. If this estimate is

correct, the total number of sheep must now be nearly 100,000,000—quite the amount which is set down to Australia—and next season must show an extraordinary increase in the clip, unless drought or too much rain carries off many of the animals.

E. L. BAKER,
Consul.

CONSULATE OF THE UNITED STATES,
Buenos Ayres, April 6, 1882.

ST. THOMAS AS A PORT OF NECESSITY.

REPORT BY CONSUL SMITH.

The privileges accorded to vessels entering the port of St. Thomas in distress are defined by law as follows:

Vessels that on account of contrary winds, damages sustained at sea, or other disastrous occurrences, as also for the preservation of their cargoes, put into the port, but re-export the said cargoes for account of the original owners, whether after having been discharged or not, shall be exempt from ship dues, and the cargoes shall be free of duty.

If such a vessel re-export but a part of the imported cargo for account of the original owners, or other goods are laden, then the vessel shall be subject to ship dues, in conformity with the general rules, and with regard to that part of the cargo so discharged and not reshipped, the same shall be liable to the ordinary duty.

If the vessel is condemned and the cargo exported in another vessel, no duty shall be paid on said cargo; but the vessel or vessels in which it is exported shall be subject to ship dues in conformity with the general rules. Vessels that in consequence of damages at sea, put into port, and re-export their cargoes for account of original owners, whether the said cargoes have been discharged or not, shall likewise be exempted from the fees to the harbor master; but vessels putting into the port in consequence of other unfavorable occurrences shall be subject to the said fee at the rate of eight cents for each commercial last of the vessel's entire burden.

Besides the Danish vessels, only vessels of such foreign states that admit Danish vessels to similar exemptions in their colonies, or, if not in possession of such, in their own ports, shall be entitled to the above-mentioned concessions.

In order to benefit by the above concessions, the parties concerned must adhere to the regulations which the custom-house authorities may deem proper to make with regard to the discharging and the reshipment of the cargo.

ARRIVALS IN DISTRESS.

According to statistics obtained from the custom-house, 103 vessels have entered the port in distress during the past three years, as follows:

April 1, 1879, to March 31, 1880	24
April 1, 1880, to March 31, 1881	42
April 1, 1881, to March 31, 1882	37

FACILITIES FOR REPAIRING.

The facilities for repairing are ample to meet the demand. There is a floating dock, the dimensions of which are—

Extreme length	feet..	250
Inside breadth	do...	70
Length of keel which can be taken out, about	do...	270
Greatest draft at which vessel can be taken out	do...	20
Gross weight capable of being lifted	tons..	2,700

There is also a steam-slip capable of taking up a vessel of 1,200 tons. Both dock and slip are under the management of the St. Thomas Dock Company.

Shipwrights, sailmakers, and riggers execute their work well. A large supply of spars, and other material necessary to fit out a vessel, is constantly kept on hand. Steamers requiring to refit can be attended to with fair dispatch at the shops of the Royal Mail Steam Packet Company.

BROKERS.

Although a master is not required by law to transact his business through a broker, as a rule he does so. There is great rivalry among the brokers to secure the consignment, and it is not until after the vessel has been duly entered at the consulate and custom-house that the one who has been selected feels sure of his prize. The broker assumes no responsibility whatever, and the entire business of the vessel is transacted in the name of the master.

COMMISSIONS.

The customary commissions charged American vessels are 1¼ per cent. on value of cargo landed; 1¼ per cent. on value of cargo reshipped; 2 per cent. on value of cargo stored; 5 per cent. on disbursements; $100 agency commission.

In the event 2 per cent. on the value of cargo stored does not cover actual cost of storage, then the amount paid is charged. French and Spanish vessels are only charged actual cost of storage, which ranges from $25 to $100 per month in cases of ordinary cargoes.

These commissions are divided between the broker, master, and sometimes the owner of the vessel. It is said that the master seldom receives less than one-third, besides the percentage he receives on bills approved by himself. It is also claimed by agents for underwriters that vessels are sometimes discharged when there is no necessity whatever for so doing, it being done solely for the purpose of securing the commission of 4½ per cent. on the value of the cargo discharged, stored, and reshipped.

CUSTOMARY PROCEDURE.

Before proceeding to make repairs or discharge cargo it is customary for the master to request the consul to appoint a board of survey on his vessel. If the vessel is American the form of application is in substance as follows:

> I have to request that you will appoint a board of survey upon the vessel under my command, to consist of John Doe and Richard Roe, master mariners, and John Brown, master shipwright, in order to ascertain her present state and condition, and what had best be done for the interest of all parties concerned.

The surveyors named by the master having been appointed, they go on board, remain an hour or so, during which time a casual examination is made, and the wishes of the master ascertained. A memorandum of their observations and recommendations is then given to the broker, who writes their report, which is signed before the consul and deposited in the consulate. The report having been made in conformity with the wishes of the master, he at once proceeds to carry out the recommendations made therein, or awaits telegraphic instructions from her owners. Unless it is the intention to condemn the vessel, no competition is invited for the repairs that are to be made or for landing, storing, or reshipping the cargo. As there are three master shipwrights, each of whom keeps on hand a good supply of material necessary to refit a ves-

sel, as well as several sailmakers, riggers, and stevedores, the cost of repairs and other expenses might probably be materially reduced by advertising for tenders; but so long as the commissions of the broker depend on the amount of money disbursed, and the same are satisfactory to the master, it is not probable that competition will be asked.

CONSULS AND UNDERWRITERS' AGENTS.

American consuls are instructed "to co-operate with the recognized agent of American underwriters, if there be one at the port, and if the vessel or cargo has been insured in any company which the agent has authority to represent." The consul at this port has repeatedly offered to co-operate with the special agent of different boards of underwriters to secure, if possible, a reduction of the commissions charged by brokers, as well as to try and bring about a change in some of the customs of the port. As the agent has never availed himself of the offer, it is apparent that he either believes the commissions reasonable, and the customs perfect, or that no benefit would result from an effort in that behalf.

The instructions given by underwriters to their agents, and by the Department of State to consuls, are so conflicting that it would be difficult for agents and consuls to co-operate, if so disposed. This will be apparent on comparing the instructions, which read as follows:

> The expenses for consular services in foreign ports, when availed of, being generally very large, you are hereby informed that so far as the companies composing this board (board of underwriters of New York) are concerned, consular certificates, or authentications of surveys or estimates are not regarded as essential at places where this board has a resident agent; the certificate or authentication of such agent being deemed quite sufficient. Nor is it essential that surveys should be ordered by or through the consuls, or that the reports of surveys be authenticated by them, except in cases where moneys are to be raised on bottomry and on respondentia. A survey ordered by or through a resident agent will serve all the necessary purposes. The certificates of the agents of the board of examinations and surveys of damaged goods by themselves are accepted as proofs, and are in conformity with the terms of the policies, which provide that "proofs of loss are to be authenticated by the agents of the company."

Paragraph 332 of the Consular Regulations, 1881, reads as follows:

> It is understood that in some instances instructions have been issued to resident agents to the effect that consular certificates or authentications of surveys or estimates, and of the examination and surveys of damaged goods, are not regarded as essential; and that orders of surveys are not required to be made through the medium of consular officers, or reports of surveys authenticated by them, except in cases where funds are to be raised on bottomry and on respondentia. Consular officers, however, are instructed that all surveys of vessels are to be inaugurated and conducted under their authority and supervision, and that when a master undertakes to conduct the proceedings without such sanction and authority, he is none the less liable for all lawful consular fees and charges.

When an underwriter's agent, obeying his instructions, insists upon the master transacting his business without the intervention of the consul, and the consul, obeying his instructions, insists that the same must be conducted under his authority and supervision, there certainly can be little or no harmony or co-operation between them.

COMMISSIONS ON STORAGE.

The board of underwriters of New York has issued a pamphlet containing suggestions to masters of vessels, one of which is as follows:

> In no case ought the cargo to be unladen without the clearest necessity. It is not only very expensive but creates a great delay, and is apt to end in serious injury to the cargo. The intelligent shipmaster will generally form a good opinion on this sub-

ject, and should consult such skillful persons as he may find, and who can gain nothing by his unloading. When unloading is concluded to be necessary, the shipmaster should be careful to stipulate against a charge of commissions on the cargo for merely discharging, storing, and reloading, as no substantial responsibility is thereby incurred, and in most cases a charge of commission for such transactions are considered unreasonable and extortionate. When allowed it should never exceed one and a quarter per cent. Should an unreasonable sum be required or a high commission be demanded the master can obviate the difficulty by hiring a store-room and retaining entire control of the cargo himself. A proper charge for storage and a regular commission for the general business of the ship under repair will afford, in most instances, a fair and adequate remuneration for agency services. Any reasonable compensation to the merchant for his actual trouble, responsibility, and services will be justly chargeable and freely allowed. The difference between such charges and a commission on the whole cargo will be obvious to every shipmaster.

It sometimes happens that a master acts in accordance with the foregoing suggestions. That is to say, he either attends to his business without consigning his vessel to a broker or stipulates that only actual cost of landing and storage shall be charged.

A few weeks since the master of an English vessel determined upon attending to his business without the assistance of a broker. The cargo of his vessel being quite valuable, persistent efforts were made by some of the brokers to secure the consignment of vessel and cargo, but without success. When he had completed his repairs and was ready to proceed on his voyage the tax commissioners, at the instance of one of the brokers, assessed him $625. This was the highest amount he could have been taxed had he been engaged in general business for one year. He duly and legally protested against paying the same, and it was remitted by the governor on the ground that existing laws did not warrant its collection.

If a master is so disposed he can readily get his broker to relinquish the charge of 2 per cent. on the value of the cargo stored, and perhaps a reasonable reduction of the charge of 2½ per cent. on the value of the cargo landed and reshipped. If one broker will not consent to such relinquishment and reduction, another just as competent and responsible will. If this is not done it can safely be asserted that some one besides the broker receives a large share of the commissions charged. If it was not necessary for the broker to divide his commissions in order to secure the consignment of a vessel, underwriters would find no difficulty in obtaining a material reduction of the same.

In order to ascertain whether there was a disposition on the part of any of the brokers to reduce the rates of commissions charged, I addressed a circular letter to several of them, the substance of which was as follows:

GENTLEMEN: If not deemed inconsistent with your interests, and you can otherwise consistently do so, I would be pleased to have you furnish this consulate, in detail, the several charges or commissions you would exact in case an American vessel should arrive at this port in distress and be consigned to your firm, said vessel and cargo being insured in the United States.

I would be glad to have you base your reply, if any, on the supposition that the cargo is discharged, stored on shore, and reshipped; and that the value of the cargo is, say, $100,000, and actual amount paid for storing same, say, $100.

Any other information you may deem proper to give relating to charges, &c., in cases of distressed vessels will be duly appreciated.

To this letter I received the following reply from Messrs. Federsen, Willink & Co., viz:

SIR: We beg to acknowledge receipt of your esteemed communication of 20 instant, and state in reply that our charges or commissions in cases mentioned by you are as follows: 2½ per cent. commissions on value of cargo discharged and reshipped, 5 per cent. commissions on cash disbursed in accordance with former custom. With regard to storage, we have hitherto charged 2 per cent. on value of cargo discharged,

but consider it advisable that this charge be altered to amount actually paid. In view of the general reduction of all charges of commissions, and considering the desirability of establishing the charges for vessels in distress in accordance with other ports, we beg to observe that we are willing to accept the rate of charges as noted in the circular of Lloyd's agent at this port, which are as follows:

On goods landed on account of damages incurred by vessels and reshipment on same:

	Per cent.
When the value does not exceed $10,000	2½
When the value exceeds $10,000, and does not exceed $25,000, $250,* or	2
When the value exceeds $25,000, and does not exceed $50,000, $500, or	1½
When the value exceeds $50,000, and does not exceed $100,000, $750, or	1
When the value exceeds $100,000, $1,000, or	½
Storage, actual amount paid	
On the vessel's disbursements when agent is in funds	2½
On the vessel's disbursements when agent finds funds	5
Commission on letters of credit, and advance of funds from which no other commission is derived	1½
Commission on guarantee of sale (*del credere*), when the terms do not exceed six months	2½
And on each month beyond six	½

The following is the reply made by Messrs. Lamb & Co.:

SIR: * * * We inclose a card of our firm which we issued about twenty years ago, and on which we stipulate our charges to vessels in distress, and otherwise. We have not deviated from same, and we may inform you that they have been recognized by the Atlantic Mutual Insurance Company of New York, the largest underwriting society in the United States. We have not had many American vessels in distress consigned to us, but in the few instances on record the owners have been quite satisfied with the manner the business has been transacted here.

We have had several British vessels here in distress in the course of the last two years, bound with cargo to American ports, and vessels and cargoes insured in American societies, in all of which cases our scale of charges referred to above has been adhered to, and has in every instance been accepted by the underwriters and owners.

The card referred to reads as follows:

A question having been lately raised here as to what is the proper charge of commissions to vessels arriving in distress, on the value of cargo landed and reshipped, and there being some parties who fix this at 5 per cent., and others at 2½ per cent., the undersigned take the opportunity of stating that their custom to date, and that of several other respectable and responsible houses here, has always been the charge of 2½ per cent., and which it is intended to continue, under the conviction, from experience, that it is sufficiently remunerative.

The other charges to vessels in distress are, 5 per cent. on all disbursements, 2 per cent. storage, 5 per cent. on sales of cargo or ship, and the actual outlay for cooperage, porterage, duties, &c.

The undersigned avail themselves of this occasion to state also the charges usual here to vessels arriving without accident: $50 for entering, clearing, and attending to general business, when vessels bring cargoes. No commission for entering and clearing when vessel is in ballast, except in case of charter, when 5 per cent. commission is charged on amount of freight; 5 per cent. on advance for disbursements.

The reply of Messrs. Philips & Co. was as follows:

SIR: We acknowledge receipt of your letter of 20th instant, in which you ask us to furnish your consulate with the commissions charged on American vessels arriving at this port in distress and consigned to our firm. In reply we have to say that hitherto we have charged the following: 1½ per cent. on cargo landed, 1½ per cent. on cargo reshipped, 2 per cent. storage, when this equals amount paid $100 agency commission.

These are the customary commissions charged at this port for a number of years, and while we have not as yet determined to reduce any of them, we would be willing to concede a reduction in the charge for storage when the cargo is of unusual value.

The following reply of James T. Abbott is only given to show that the underwriters are mistaken when they declare the commissions charged

* At the option of the consignee.

by him to be "unreasonable and extortionate," or that they have not been as well pleased with his accounts as he presumes they are:

SIR: We have to acknowledge receipt of your communication of the 20th instant, and in reply to state that our charges for doing business with American vessels arriving at this port in distress are well known to ship owners and underwriters in the United States; and in our long experience as merchants of St. Thomas, none of our accounts with such have ever been questioned. It would, therefore, be superfluous, we think, to enter into any further detail on this subject.

The firm of G. W. Smith & Co. did not deem it necessary or advisable to acknowledge the receipt of my letter. This is to be regretted, as it is an American firm and does the principal business of American vessels. It is presumable, however, that the commissions and practices do not materially differ from those of other firms, and that owners and underwriters are neither more nor less pleased with the same, than they are in cases where vessels are consigned to other parties.

It will be observed that the board of underwriters of New York denounce the charges made by the brokers as "unreasonable and extortionate," and assert that "no responsibility is incurred by them" in cases where the cargo is landed, while on the other hand the brokers say:

The companies composing the board are in every instance perfectly satisfied with the charges made by them, and the manner in which they conduct the business confided to them.

If the underwriters really believe that the charges prevailing at this port are "unreasonable and extortionate," and desire that the same should be made to conform to the rates charged at other ports, it would be advisable for them to send an intelligent and responsible representative here to consult and arrange with the brokers, as was done some years since.

The French and Spanish consuls have secured the remission of the charge of 2 per cent. on storage of cargoes carried in French and Spanish vessels. Instead of being informed by the underwriters of their respective countries that their services are neither solicited nor desired, everything connected with the vessel and cargo while in port is done under their supervision, and all bills contracted must be presented to them for their approval or disapproval. There is apparently no reason why the same could not be accomplished in cases of American vessels if the co-operation of the consul was solicited by the underwriters. The experiment might at least be tried. If nothing was accomplished, certainly nothing would be lost.

CONSULAR CHARGES.

As the instructions of the underwriters to their agents that "the services of the consul are not essential or desired" are based on the ground that the charges for such services are generally very high, I give, as a specimen of consular charges at this port, the following itemized bill rendered the American bark Blanche How, of Portland, which vessel arrived at this port in distress, with a cargo of sugar, and went through the usual formula of landing, storing, and reshipping cargo after the vessel had been repaired, viz:

Tonnage dues	$5 67
Noting protest	2 00
Extending protest	5 00
Four warrants of survey	4 00
Certifying signatures to four surveys	4 00
Filing papers pertaining to surveys	3 00

Authenticating eleven copies of surveys and protest	$11 00
Bill of health	2 50
Three copies of first survey, at $5	15 00
Two copies of second survey, at $5	10 00
Two copies of third survey, at $5	10 00
Two copies of fourth survey, at $5	10 00
Two copies of extended protest	10 00
Total	92 17

Three other American vessels have been at this port in distress during the present year. The official and unofficial consular charges for each, respectively, aggregated as follows: Ida Lilly, $58.32; Lizzie Zittlossen, $30.09; Mary Gibbs, $32.64. The total amount of the consular bills for the four vessels, over what the same would have been had they been destined for this port with cargoes, and arrived without accident, is $147.25, an average of $36.81 each. The charges made are in exact accordance with the tariff prescribed by the Consular Regulations for 1881.

MISCELLANEOUS.

Lloyd's agent at this port has for several years been trying to get the brokers to adopt a scale of charges as fixed by Lloyd's. As this scale does not admit of a division of the commissions with either the master or owner, it is not difficult to account for his failure to secure its general adoption. In the reports he has made to the companies he represents, he assumes that the brokers are solely responsible for the excessive charges and practices prevailing at the port. In this I think he is mistaken. Any upright shipmaster or owner can consign his vessel to a broker and have his business attended to by him at reasonable rates and in a perfectly legitimate manner. On the other hand, if the master or owner is disposed to make all he can for himself, he will find a broker willing to assist him. If one should refuse to do so, he will search until he finds one who will. Therefore, I am inclined to the opinion that the master of the vessel, who is the trusted agent of all parties concerned, is more to be censured than are the brokers.

It is due to the efforts of Lloyd's agent that it has been definitely settled that a master can attend to his business without consigning his vessel, and that he is not subject to pay a tax for so doing. No reasonable excuse can hereafter be given by a master or owner for permitting charges that are declared by the underwriters to be excessive.

V. V. SMITH,
Consul.

UNITED STATES CONSULATE,
St. Thomas, May 12, 1882.

CANADIAN CANALS.

REPORT, BY CONSUL PAGE, OF PORT SARNIA.

During the last ten years much activity has been manifested by the Government of the Dominion of Canada in the direction of enlarging the Welland and Saint Lawrence Canals, the ultimate object being to furnish a water-channel from the lakes to the seaboard sufficient in depth and width to admit vessels of 1,000 and 1,200 tons capacity. These works have assumed such proportions already as to warrant a

belief in their final and speedy accomplishment. Contracts have been awarded for building locks and removing rocky obstructions from the various channels intervening between Lake Erie and the harbor of Montreal, and a large percentage of this great and difficult task has already been successfully accomplished; and it is only a question of time, and, in my opinion, a very short time, when vessels laden with 50,000 or 60,000 bushels of grain may pass from Chicago or Duluth to the Atlantic Ocean without literage or breaking of bulk. No matter what American interests may be jeopardized by the successful accomplishment of this new system of artificial navigation, this fact at least is made prominent. Ocean vessels of large tonnage, laden with the products of Europe, will be safely conducted to our inland lake ports, and lake vessels, equal in capacity, will surely find an outlet to the sea. In 1871, when the Canadian Government first resolved to enlarge and deepen the Welland and Saint Lawrence Canals, it was decided that the uniform depth of water in the various channels should be 12 feet. In 1875, however, actuated by the pressure of public opinion, 14 feet was fixed upon as the proper depth, and now all contracts for work to be performed are based upon this scale.

Since 1871 to the present time over $20,000,000 have been expended by the Dominion Government in this work, and the public spirit thus manifested has been amply rewarded; for those who doubted the feasibility of the undertaking at first are now forced to admit that the scheme is entirely practicable. Previous to the present season of navigation a vessel whose registered tonnage exceeded 350 or (at the most) 360 tons, laden with more than 22,000 bushels of corn, could not navigate the Welland Canal; but during the present month (although the work of enlargement has been only partially performed) a vessel of about 700 tons register, laden with 40,000 bushels of corn, was successfully transported from lake to lake. That which seemed chimerical at first has been demonstrated to be sound and practicable, and the Canadian people are justly proud of the perseverance, enterprise, and skill which has been instrumental so far in removing many obstacles from the path of commerce, and foreshadowing the near approach of the time when the ocean and lake transportation shall be blended into one continuous route.

The canal systems of Canada, under the control of the General Government of the Dominion, are as follows, viz:

1st. The river Saint Lawrence and lakes.
2d. The river Ottawa.
3d. The Rideau navigation from Ottawa.
4th. The Trent navigation to Kingston.
5th. The river Richelieu to Lake Champlain.
6th. Saint Peter's Canal, Cape Breton, Nova Scotia.

The works of the Dominion Government are comprised in the distance between Montreal and Lake Erie, a distance of 375 miles. The canals on this route are the "Lachine," "Beauharnois," "Cornwall," "Farran's Point," "Rapide Plat," "Galope," and "Welland." Their total length is 70½ miles; total lockage, or height overcome by locks, is 533¼ feet; number of locks, 53; the whole distance from Belle Isle, Canada, to Duluth, via the great lakes, is 2,384 miles; 71 miles of this distance may be regarded as artificial navigation, which includes the locks and other mechanical constructions of the Welland and Saint Lawrence Canals, and 2,312 miles is open navigation. For statistical and other information in relation to Canadian canals, I am indebted to Sir Charles Tupper, minister of railways and canals of the Dominion of Canada, who has kindly furnished me with two annual reports upon this subject.

When we take into consideration the amount of money expended and the vast amount of work so successfully performed in the construction of this great commercial highway to the seaboard, we can appreciate the energy and perseverance of the Canadian people. According to the best obtainable information, the population of this country scarcely exceeds 4,000,000 of people, and this population, diversified in character, is scattered from ocean to ocean, along the line of the Canadian frontier, and thus they have not the advantages of concentrated wealth. From the public press of Canada, I learn that the public debt of the Dominion exceeds $199,000,000, with available assets amounting to a trifle over $44,000,000. This debt does not decrease; on the contrary, each succeeding year shows an increase in national indebtedness over the year past, but it is doubtless a subject of consolation for the Canadian people to know that in the same ratio as their public debt becomes larger, their railroads extend farther, and their canals become deeper and wider. At this time, when the subject of cheap transportation is so generally canvassed by our own people, I have thought it proper to report upon what is actually being done to further that object in Canada.

The question whether American enterprise shall undertake to furnish an outlet for the surplus products of the great West by constructing free and capacious water-ways *through American territory* to the sea, sufficient in size to admit our largest lake craft to compete with the tonnage of other nations in the grain-carrying trade, or whether we shall be compelled to navigate the canals of Canada and thus pay tribute to a foreign State, is one of the questions which must present itself to Congress for solution in the near future. Comparatively speaking, we have natural advantages over our Canadian neighbor in the matter of building and maintaining a ship canal. These advantages consist mainly in having a better terminal point. There is perhaps no portion of the Atlantic coast more to be dreaded and feared by the mariner than the Gulf of Saint Lawrence and the banks of Newfoundland, long regarded as a rendezvous for icebergs and the home of fog. Whilst money and enterprise and skill have been successfully employed to remove the rocks and other obstructions found in the rivers and lakes which compose the intervening channel to the seaboard, the combined wealth and enterprise of the world cannot turn a single iceberg from his course or drive him from the paths of commerce. It is here that his icy breath may generally be felt during the season of navigation, and it is here, enshrouded in dense fog, that he is so frequently the cause of shipwreck and death.

That the Canadian merchants fully appreciate the danger and delay so frequently met with in navigating the Gulf of Saint Lawrence may be inferred from the fact that many importers from Ontario will stipulate with the foreign producer in Europe to have their goods sent via Portland and New York, notwithstanding the extra charges, in the way of railroad freights and other incidental expenses, which must always attend the reshipment of freight through a foreign territory, rather than take the risk of having them sent via their own Saint Lawrence route.

To the people of the United States there are two routes for a ship-canal to the seaboard. One would consist of enlarging the Erie Canal from Buffalo to New York, and the other might be constructed from Lake Ontario, via Lake Champlain, to the deep waters of the Hudson. Either route may be considered entirely practicable, and both have as a terminating point the city and harbor of New York. Should Congress deem it wise to suspend for a single year the usual decrease of our national debt, and apply the funds which would as a consequence accumu-

late in the Treasury to the credit of the general government to the construction of a ship-canal to the Atlantic, it is not probable that a further appropriation would be needed to complete the work. This canal would be wholly within our own territory, and it would terminate in a much milder climate than that of the Saint Lawrence route.

SAMUEL D. PACE,
Consul.

UNITED STATES CONSULATE,
Port Sarnia, Canada, May 5, 1882.

FISH AND FISHERIES OF NORTHWEST AFRICA.

REPORT BY CONSUL DABNEY, OF TENERIFFE, CANARY ISLANDS.

Some years ago I had the honor to direct the attention of the Department of State to the very valuable fisheries which exist in the neighborhood of these islands, on the opposite coast of Africa, extending down the same as far as, and beyond, Cape Blanco, some 600 miles.

There having been lately organized a company to prosecute these fisheries on a large scale, nominally Spanish, which it must be in order to obtain the necessary concession from the Spanish Government, but in reality with English capital, it would seem to be a fitting occasion to again address the Department on the subject.

Almost as soon as these islands became known, and before all were conquered, the Spanish knew of and prosecuted these fisheries, and as long ago as 1764 Captain Glas, in his book entitled "History and Discovery of the Canary Islands," published in London in that year, tells us that there were then employed thirty vessels of from 15 to 50 tons, which supplied the islanders with salt fish, which then, as now, with gofio and potatoes, formed their chief sustenance.

These fishing grounds, besides being so extensive, are said to swarm with valuable fish, and, from what I can hear, I should say that they are much more abundant than the codfish on the banks of Newfoundland, which opinion is confirmed by the late Mr. Sabin Berthelot, for many years French consul in this island, and who made the study of fish and fisheries his great occupation. And when we consider that these fisheries can be prosecuted all the year round, the best season being in winter, say from October 1 to April 1, unlike more northern ones, it must be looked upon as one of the very best in the world. The kinds of fish which most abound are:

The sama. *Serranus acatirostris*, Cuv.
The sama doradu. *Dentex-vulgaris*, Cuv.
The sama grande. *Chrysophyrs-coernleostica.*
The pargo. *Dentex filosis*, Nob.
The cherne. *Perca cernua.*
The corbina. *Corvina nigra*, Cuv.
The abadejo. *Serranus fuscus*, Low.
The pez rey. *Temnodon sattutor.*
The rubio. *Frigla lineata*, Linn.
The abriote. *Phycis limbatus.*
The tusarte, very delicate, like salmon, and many others.

The first five named being the most abundant and forming the greater part of the catch, and averaging, say, twenty pounds each fish, although often caught double this size.

Glas and others say that the codfish is also found, but after very careful investigation I am convinced that it does not frequent these waters, and that they must mean the cherne, *Perca cernua*.

There are as many as 35 vessels employed constantly in fishing, and others occasionally; they are schooners and sloops of from 25 to 80 tons, carrying from 15 to 30 men and boys, according to size. They sail on shares, and fish entirely with hook and line, not using seines or trawls that I can hear of.

The fish are opened and cleaned and packed down in salt in the hold, and this is done in such a careless and slovenly way that they soon acquire a strong smell and taste, very repulsive to those not accustomed to it, but which the islanders do not seem to mind. Under very favorable circumstances of weather and abundance of fish a vessel of 40 to 50 tons often fills in five days' time; they then go to one of the islands and land their cargo, to be sold by their agents, and the fish are consumed without any farther preparation. In this way each vessel can make from ten to twelve trips a year, and even more.

Beyond supplying the islands, there is no market for their fish, owing to the rank taste and smell consequent on the careless way of cleaning them. A small quantity, say, 100 tons a year, is shipped to Cuba, pickled in brine. The common price of this fish in the island is about $2.25 to $2.50 per 100 pounds, and the quantity consumed cannot be less than 8,000 to 9,000 tons per annum, which may be worth $350,000.

The establishment of the company already referred to may lead to large results, if they can produce a marketable article suitable for Spain and foreign markets. They have had a part of the island of Graciosa (an uninhabited island near Lanzarote, and only separated from it by a narrow channel) given to them by the Spanish Government, on which they have erected extensive storehouses and other buildings. They have several sailing vessels to catch the fish on the fishing grounds, and two small steamers to carry the fish to Graciosa, to be there dried and prepared for market by Scotch fishermen.

There is also another enterprise, that of carrying fresh fish in refrigerator steamers, carried on by a French company of Marseilles, who send their steamers to Grand Canary, where they engage vessels to go with them to catch the fish, and when full they carry them to France to market.

WM. H. DABNEY,
Consul.

UNITED STATES CONSULATE,
Teneriffe, February 28, 1882.

DISAPPEARANCE OF THE SARDINE.

REPORT BY COMMERCIAL AGENT GIFFORD, OF NANTES.

The sardine having long been the principal item of export to the United States from this part of France, its disappearance is a matter of considerable commercial importance, for the fishermen themselves it is an overwhelming calamity, as the phylloxera is for the vintagers on the Charente.

The sardine has generally appeared on the Vendean coast about the first of May, and following the shores of the Bay of Biscay northward, has furnished occupation to some 15,000 Vendeans and Bretons and 3,000 boats. Formerly the annual catch was worth at least $3,000,000.

But, in 1879, the sardine suddenly disappeared, for the most part, and the two following years having given most unsatisfactory results, it is with a heavy heart that the discouraged fishermen are now fitting out their boats for the season which begins next month. The commercial houses engaged in the preparation of the fish for the market have in a measure escaped loss by advancing their prices, but charity alone keeps the fishermen from absolute destitution.

This disappearance of the sardine has been coincident with an extraordinary change of climate, which has attracted the attention of meteorologists and other scientific observers, who have endeavored to establish some relation between the phenomena. The winter on the Breton coast is generally characterized by a low barometer and very frequent rains. During the four months from November, 1878, to February, 1879, for example, it rained at Nantes the extraordinary number of 79 days and at Lorient 86 days, while the average rainfall in western France during that time was about 15 inches. During the corresponding months of the season which has just passed it did not rain at all on this coast, and the high barometric pressure has been almost incessant. The storms, the arrival of which has ordinarily been predicted with so much accuracy from New York, have passed to the north, and the southwest wind, laden with moisture and bringing frequent rains, has given place to a dry wind from the northeast. And this, in a somewhat less degree, was also the meteorological history of 1880–'81 and of the preceding year.

The effect of this high pressure and change of wind on the temperature has been by no means constant. The average winter temperature in western France is not far from 45° Fahrenheit. But the winter of 1879–'80, with its cloudless sky, was one of extreme rigor, during which the Loire was for several weeks frozen over. During the winter just passed, the sky often being concealed by a thick fog, there has been neither snow nor ice on the lower Loire. But the constant features of the three past winters have been the relatively small rainfall, the high barometer, and, for the first two years, the absence of the sardine on the coast during the following summer.

Mr. Blavier, President of the Maine et Loire Industrial Society, has recently read a paper before the Academy of Sciences in which he accounts for these facts by the alleged displacement of the Gulf Stream, one branch of which ordinarily laves the coast of the Bay of Biscay, rendering the climate very much warmer than that of corresponding latitudes in North America. The sardine always follows this warm current, and has now accompanied it in the new path which it has made for itself in the ocean.

According to Mr. Blavier the fishermen have no reason to anticipate a good catch until the breaking up of those great ice masses in Baffin's Bay, which, it is believed, have for several years obstructed the flow of that cold arctic current by contact with which, off the banks of Newfoundland, the Gulf Stream has hitherto been deflected toward Europe.

If this view is correct the coming season will be as unproductive as those which have preceded. In that case the misfortune of the Vendean and Breton fishermen, however regrettable in itself, cannot fail to encourage the "sardine" industry which has already acquired so considerable a development in the United States.

GEORGE GIFFORD,
Commercial Agent.

UNITED STATES COMMERCIAL AGENCY,
Nantes, France, April 4, 1882.

THE HERRING FISHERIES OF NORWAY.

REPORT BY CONSUL GADE, OF CHRISTIANIA.

The rich herring fisheries which have been carried on for many years during the winter on the western coast of Norway have given but a poor yield during the last decade. The fishermen, however, still assemble on the old fishing grounds at the usual time, and the government still appoints inspectors, generally naval officers, to enforce police regulations during the expected fisheries. According to the official statistical tab'es of this country 432,000 hectoliters (1 barrel=116 liters) of the so-called spring-herring were caught here in 1870, and only 1,200 hectoliters in 1875. The number rose again in 1879 to 89,100 hectoliters, but was still considered a failure. In the mean time immense numbers of herring have appeared during the past three winters on the southeastern coast of Norway and on the adjacent Swedish coast, where the herring fisheries were of great importance about a century ago. The Christiania Fjord runs more than eighty miles northwards from the sea to this port at its head. The Hvaloer Islands are situated at its entrance, and in their neighborhood about 250,000 barrels of herring of excellent quality have lately been caught, but as the population there had neither salt nor barrels on hand sufficient for the proper preparation of the fish, the fishermen's returns have by no means been commensurate with the quantity of the fish present.

It is reported that several new factories for making barrels will soon be built at Fredrikstad, a port within this district, having a large lumber trade. Only two such factories exist in this country, the larger of which at Christiansund, which is provided with American machinery, producing annually over 150,000 barrels. The general price of a barrel for packing herring is in this country crowns 1.50, or about 40 cents. The annual consumption of barrels for packing fish and roe, which latter article is exported to France as bait for the sardine fisheries, is estimated at more than one million.

GERHARD GADE,
Consul.

UNITED STATES CONSULATE,
Christiania, March 15, 1882.

THE MALDIVE ISLANDS.

REPORT BY CONSUL MOREY, OF COLOMBO, CEYLON.

It has been upon my mind for more than a year to write to the Department concerning the Maldive Islands, an archipelago about 400 miles from Ceylon.

These islets, several thousand in number, are divided into 17 groups called atolls, each cluster having a natural boundary of coral reefs, with apertures, through which admittance is afforded to the inclosed islands, which are highly cultivated and thickly inhabited, the present population being estimated at 8,000 to 9,000 people.

The northmost group, called "Tillacton Malle Atoll," lies in 7° 6′ north latitude, being, therefore, due west from Ceylon, and between it and "Mimcoy," the southmost of the "Laccadive Islands," is a broad,

navigable passage, known as the Eight Degree Channel, through which pass nearly all the steamers bound from the Bay of Bengal and the far east, through the Suez Canal, and vice versa.

The southmost atoll lies about on the 1st southern parallel, and the whole archipelago is about 500 miles long by 50 miles broad.

Through it there are said to be at least four channels, navigable for large ships, and from time immemorial it has been in the hands of nautical Arab adventurers, or their descendants, the present inhabitants, whose language is still largely Arabic.

"Malle Atoll," in latitude 4° 10′ north, longitude 73° 40′ east, is the capital and residence of an independent sovereign, called the Sultan of Twelve Thousand Isles; who acknowledges some feudal dependence to the British Government, of this island, and sends an embassy here with presents every year; besides being very kind and gratuitously hospitable to the mariners, who are sometimes shipwrecked on his coasts. He also keeps up a commercial establishment in Colombo, which exports to the island yearly, goods valued at about $160,000; $30,000 of which is in cotton manufactures, and the moiety of the balance in rice.

The cottons are, I believe, a mere make-shift of the inhabitants, who buy them because there is nothing more suited to their taste obtainable. They having, in fact, styles of dress and patterns of goods peculiarly their own, the women particularly affecting a picturesque garb woven by themselves from cotton-yarn imported from abroad. A specimen of this costume is now on view in the Colombo museum, and could, I conceive, be easily and profitably imitated in the United States; especially the skirts and handkerchiefs, which, strange to say, no British manufacturers have, so far as I know, yet essayed to copy, possibly because of their pure and substantial texture.

The Maldivians also have a large trade with Calcutta, conducted in vessels of 150 to 200 tons burden, foreign built, and most of their fine coir yarn goes to that port, whereas the traffic with Ceylon is carried on in small domestic-built craft, of wonderful form and construction.

The imports into Ceylon from the islands about equal the exports thereto; they are made up of dry fish, confectionery, fancy meats, tortoise shell, and the products of the cocoanut tree, among the latter being $20,000 worth of very superior coir yarn, which would find a ready sale in the United States.

Three years ago a member of the local civil service made a special visit to the Maldives, some notice of which, and photographs, appeared in a London illustrated newspaper.

The local government also decided to publish, in the form of a sessional paper, a full account of this visit; and nearly a year ago I was kindly promised by Mr. Bell, the gentlemanly author, to be given, within a month or two at most, a copy of the report, which I purposed sending to the Department. However, through no fault of his, I am sure, the report is still in manuscript only, and therefore a sealed book to the public.

I am also inclined to think that Mr. Bell's report has a more antiquarian turn than active commercial tendency, and it may not after all be published; I have thought, therefore, that, considering their naturally commanding position, etc., it might be worth our government's while to learn about the commercial facilities and importance otherwise of these islands than is at present known.

W. MOREY,
Consul.

UNITED STATES CONSULATE,
Colombo, Ceylon, April 12, 1882.

THE ISLAND OF ANGUILLA.

REPORT OF CONSULAR AGENT REY.

The island of Anguilla, the most northerly of the Leeward group, is situated in latitude 18° 12′ north, longitude 60° 50′ west, and lies directly in the route of vessels bound north of Hatteras from the more Windward Islands. No geometrical survey has ever been made of the island, which is flat, low, and undulating, with a few bluffs, but no hills, presenting a generally arid appearance, relieved occasionally by depressions—valleys of surpassing fertility.

There are no streams, and the place is badly watered, but, as good springs are not rare, the supply could be much improved by a little industry.

The agricultural products are cotton, corn, cassava, yams, sweet potatoes, and pulse; but, owing to severe droughts and the most primitive husbandry, the crops are not abundant, and by no means adequate to the consumption of the inhabitants, of whom there are some 3,500, and is largely supplemented by the importation of American breadstuffs from the neighboring islands.

The sugar-cane was formerly cultivated, but has been abandoned for many years; cotton, also, has been almost entirely neglected, though its finest grades may be produced here with the utmost facility, the soil being peculiarly adapted to the growth of the long staple or sea-island cotton.

The lime and orange thrive vigorously in this apparently arid land, which indicates a latent fertility in the soil that only lacks energy and some capital to develop the cultivation of those fruits into a most important industry. An enterprising inhabitant, Mr. E. L. Carty, made the experiment a year or two ago of cultivating the bitter orange on his estate, and, after many failures, finally succeeded in establishing a plantation of several thousand of those valuable trees.

Cattle, sheep, goats, pigs, asses, and ponies are bred with some profit, the animals keeping in good condition on but little grass, the nutritive qualities of which are really wonderful.

Salt is the principal export, and is produced here of as fine a quality as at Curaçoa and St. Martin's. It is heavy, white, and sparkling, and uncommonly free from lime. Coarse-crushed fishery and fine-ground salt are manufactured and constantly kept in supply.

The salt pond is situated at the Road Bay on the northwest of the island. The harbor opens to the west, is commodious, with capital holding ground, and is sheltered by bluffs to the north and south.

Anguilla, in its formation, appears to be part primitive, part coral; and, from its peculiar broken and cavernous appearance and singular stratification, offers much that would be interesting to geological research, especially in the development of its primitive flora and fauna. Of the latter the writer found, among many other interesting remains, the incisors of a gigantic rodent imbedded in the lime rock, the teeth being over three inches in length.

Phosphate analyzing over eighty per cent. has been found in different parts of the island, and though some attempts were made to open up the deposits they were all abandoned after only a very superficial examination, and before any definite result could be obtained. There is every reason to believe that the whole substratum of the island contains de-

posits of phosphate, which the American boring machine is destined some day to bring to light and to profitable development.

Nor is this little island devoid of historic interest. Settled early in the seventeenth century by a hardy and loyal race, their descendants have scrupulously preserved the religion and traditions of their fathers, and inherited that intrepid spirit which on two occasions, in 1744 and 1796, repulsed the French invaders of their island.

WAGER REY,
Consular Agent.

UNITED STATES CONSULAR AGENCY,
Anguilla, May 8, 1882.

AUSTRO-HUNGARIAN RAILWAYS.

REPORT BY MR. DELAPLAINE, SECRETARY OF LEGATION AT VIENNA.

The year 1881 may be considered remarkable in the railway annals of Austria-Hungary for importance and for successful results, as regards construction and traffic. After an interval of comparative inactivity during several years, an animated spirit of railway enterprise became developed, and the extent of communication by rail in the monarchy attained a large increase. While in the year 1880 concessions for 157.2 kilometers, in the year 1881 concessions for 455.5 kilometers of local railways were granted. At the end of 1881 only 219 kilometers were completed, and 393.7 remained in course of construction.

A list of the railways opened in 1881, in the order of date, containing a statement of their respective lengths, is hereto appended, marked Inclosure I.

From this table it appears that the whole railway net of the monarchy has gained an increase of 427.63 kilometers (of which 301.24 kilometers in Austria, and 126.39 in Hungary), while of new lines opened in 1880, were only 60.2 kilometers.

The total gross receipts of the Austro-Hungarian railways in 1881 amount to 215,951,146 florins, against 206,324,743 florins in the preceding year 1880, being an increase of 9,626,403 florins, or about 4.6 per cent.

These receipts, specifically set forth in reference to the several months in the two years, appear in a statement hereto appended, and marked inclosure 2.

From this statement a constant increase of traffic up to October is shown, while in the last two months there is a reduction, as generally occurs at that season. Altogether, in the year 1881 larger receipts than ever hitherto were attained, as is shown in the following table, embracing the results of the last ten years:

Passengers, freight, gross receipts.

Years.	Persons.	Tons.	Florins.
1872	34, 640, 000	28, 140, 000	160, 600, 000
1873	40, 570, 000	32, 990, 000	185, 400, 000
1874	38, 790, 000	33, 330, 000	177, 100, 000
1875	37, 750, 000	36, 940, 000	181, 200, 000
1876	36, 920, 000	39, 290, 000	187, 400, 000
1877	35, 200, 000	42, 880, 000	207, 300, 000
1878	35, 500, 000	43, 500, 000	202, 900, 000
1879	36, 310, 000	45, 610, 000	202, 100, 000
1880	36, 880, 000	48, 190, 000	206, 300, 000
1881	40, 280, 000	53, 270, 000	216, 000, 000

The passenger traffic was less than in 1873, the year of the Universal Exhibition at Vienna. In the freight traffic, however, as well as in the amount of gross receipts, a great increase over the results in the preceding nine years is shown.

J. F. DELAPLAINE,
Secretary of Legation.

UNITED STATES LEGATION,
Vienna, April 12, 1882.

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1. *List of railways opened in* 1881.

Date.		Name of railway.	Kilometers.
Jan.	6	Czaslau-Zlet and Tronitz-Widij-Burzic (local railway)	10.81
Apr.	1	Vipolje-Lamax (Hungarian Staatsbahn)	19.83
	30	Leirz-Klemamünster (Krems Shalbahn)	34.65
Aug.	7	Vienna-Pitten (Wien-Aspaugbahn)	54
	18	Kaschitz-Schönhof (local railway)	4.18
Sept.	5	Borosjino-Borossebes-Butttin (Arad-Körösthalbahn)	27.66
	15	Apahida-Dees (Szamosthalbahn)	45.2
	16	Totmegyen-eVntra-Gross Topohsan (Staatseisenbahn)	33.7
Oct.	4	Chodan-Nendek (local bahn)	14
	5	Botzen-Meran	31.7
	24	Kremsien-Zboromtz (Krensleurbahn)	16.5
	25	Piczek-Zasmuk and Kaurzein-Swiszhits (local bahn)	23.9
	25	Zleb-Zabratic (local bahn)	7.2
	28	Pitten-Aapaug (Wien-Aspaugbahn)	20.4
Nov.	15	Nimburg-Gitschm (Commerzialbahn)	44.1
	20	Snuder-Hochwessely (local bahn)	7.8
	26	Prague-Modrzau (Commerizialbahn)	12.5
Dec.	19	Standing-Stramberg	19.5
			427.63

2. *Receipts of railways.*

Months.	Gross receipts.		Increase.	
	1881.	1880.	Absolute.	In per cent.
	Florins.	*Florins.*	*Florins.*	
January	15,276,000	14,680,000	596,000	4.0
February	14,585,000	13,767,000	818,000	5.9
March	16,008,000	15,195,000	813,000	5.3
April	15,645,000	14,998,000	656,000	4.4
May	16,860,000	15,916,000	944,000	5.9
June	16,965,000	16,577,000	388,000	2.3
July	18,131,000	17,378,000	753,000	4.2
August	19,937,000	18,093,000	1,844,000	10.0
September	20,326,000	19,688,000	656,000	3.3
October	20,433,000	20,501,000	78,000	0.3
November	19,471,000	19,216,000	253,000	1.3
December	19,297,000	17,483,000	1,814,000	9.6

BELGIAN BUDGET FOR 1882.

REPORT BY MR. PUTNAM, MINISTER RESIDENT AT BRUSSELS.

I have the honor to forward the several budgets presented to the Chamber of Deputies by the ministers of the interior, foreign affairs, finance, public instruction, and public works, a condensed view of the internal operations of the Belgian government. The budget of the

minister of public works is in excess of the budget of last year by about 4,000,000 francs.

JAMES O. PUTNAM,
Minister Resident.

UNITED STATES LEGATION,
Brussels, April 24, 1882.

DEPARTMENT OF THE INTERIOR.

		Francs.
Expenses of the officers and employés and furnishing of the department		412,346
Aid to former employés and their widows and children, not pensioned, but in want	11,000	
Provision (gratuity to communal secretaries)	33,000	
Pensions to be hereafter granted	10,000	
		54,000
Expenses of general statistics		32,000
Salaries of governors and expensis of administration in the nine provincial departments of Bèlgium		2,161,663
Compensation to the members of military councils and for military publications		134,000
Expenses for civic guard		43,500
National fêtes		109,200
Civic decorations and rewards for distinguished acts of courage and humanity		15,000
Pensions of those decorated with the Iron Cross, and grants to their widows and orphans (this order is composed of soldiers of the war of 1830)	200,000	
Grants to the special fund for the wounded in the war of independence of 1830, and their families	50,000	
		250,000

Agriculture.

Indemnity for diseased animals (killed by order of the government)	270,000	
Veterinary service, police service, and aid to widows and orphans in need, of former veterinary physicians	125,000	
Improvement of races of domestic animals (subsidies to the provinces)	101,500	
Agricultural exhibitions and other encouragements	181,700	
Agricultural and horticultural state schools	107,400	
Other expenses, including those of conferences and juries and veterinary schools	306,525	
		1,092,125
Improvement of highways and of water-courses not navigable for considerations of public health		2,205,550
Encouragement of industrial schools		470,450
Bureau of weights and measures		124,750

Letters and sciences.

Appropriations for encouragement and development of letters and sciences, including appropriations to the royal museums and libraries, observatories, and art galleries	1,047,681

Fine arts.

For the encouragement of painting, sculpture, and engraving, including purchases of works of art, subsidies to deserving artists, and aid to the families of deceased artists	354,250
Fine art exhibitions	68,850
Royal Academy of Fine Arts at Antwerp	85,185
Academies and schools of design in other cities, including aid to young artists, awards to successful competitors, &c.	270,000
Royal museums of painting and sculpture	245,171

	Francs.	Francs.
Subsidies to towns and provinces for monuments to illustrious Belgians, and for medals commemorating memorable events...	75,000	
Restoration of monuments and preservation of works of art.....	163,150	
Encouragement of musical art:		
Royal Conservatory of Music at Brussels	149,660	
Same of Liege	73,908	
Same of Ghent.....	51,626	
Subsidies to other musical schools, encouragement to musical artists at home and abroad, aid to families of deceased artists, pensions for successful competitors, aid to annual festivals of music in the provinces, &c	172,000	
		1,708,800
Sanitary service.....		207,500
Other expenses.....		38,216
Total of the budget of the minister of interior.....		10,106,817

DEPARTMENT OF FOREIGN AFFAIRS.

Central administration.....	405,620
Salaries of 19 foreign ministers.....	874,500
Expenses of consulates.....	492,050
Expenses of travel of agents and representatives of the state.....	170,000
Other expenses connected with the foreign service.....	230,460
Extraordinary missions.....	42,000
Encouragement to commerce and publication of reports	97,800
Medical attendance on emigrants.....	18,100
Aid to employés and to widows and orphans of such in need.....	7,300
Total of the budget of minister of foreign affairs.....	2,337,830

DEPARTMENT OF FINANCE.

	Francs.	
Salaries of officers and employés.....	877,700	
Counsel and court fees.....	73,000	
Furnishing departments.....	329,700	
For documents and engraving, &c.....	48,300	
		1,328,700
Administration of treasury and of the public debt in the provinces.		
Salaries of agents.....	170,000	
Bureau expenses.....	48,000	
		218,000
		1,546,700
Administration of direct taxes and custom-house duties.....		11,337,455
Administration of registry of real property.....		2,672,425
Pensions and relief to employés and to their destitute widows and orphans.		42,000
Unanticipated expenses.....		8,000
Total of the budget of minister of finance.....		15,606,580

DEPARTMENT OF PUBLIC INSTRUCTION.

Central administration.

	Francs.	
Salary of minister.....	21,000	
Salaries of employés and other expenses of the bureau	329,000	
Pensions to retired teachers	934,078	
Aid to retired teachers not pensioned, and to their widows and orphans in need.....	73,000	
Other expenses.....	80,000	
		1,437,078
University education.		
Salaries of teachers and employés in the two state universities...	989,400	
Subsidies to and other expenses of same	511,105	
		1,500,505
		2,937,583

	Francs.
For normal and middle school expensese	3,614,911
Primary schools	13,858,119
Total of the budget	20,410,613

DEPARTMENT OF PUBLIC WORKS.

Central administration	772,970
Bridges and highways	12,123,438
Mines	456,560
Railroads	74,934,645
Postal and telegraph service	12,059,857
Marine service	3,316,245
Committees	18,700
Contingent salaries	74,000
Pensions	25,000
Relief	33,500
Unforeseen expenses	18,000
Total of budget of minister of public works	103,832,915

LIVING IN THE CITY OF MEXICO.

REPORT BY CONSUL-GENERAL STROTHER.

HOUSES AND RENTS.

The houses in this city are built of massive masonry, with stone stairways and roof and floors of brick and cement. Each house incloses one or more open courts, paved with flag-stones or planted with flowers and shrubbery, and adorned with fountains and statuary, according to the taste and wealth of the proprietor. In the suburbs the buildings are usually not over one story in height, rising to two and three in the center of the city. Each house is entered from the street by a single coach-door, which is closed at night and attended by a porter, who, with his family, occupies a room beside the gate and is responsible for the entries and exits.

This arrangement protects the occupants of the dwelling from nocturnal robbers, who can only enter by way of the flat roof of adjoining buildings, an operation always unfavorable either to concealment or escape. The city is virtually fire-proof, it being impossible to set fire to a Mexican house, except by the igniting of some accumulation of combustible dry goods or chemicals. Consequently, fires are not here regarded as among the current probabilities of life.

As the city is situated in a swamp very imperfectly drained, and the dwellings are all flat-roofed, Mexico has neither cellars nor garrets; and as the climate resembles the perpetual spring of the poets, it has neither stoves, fire-places, chimneys, nor any other appliances for artificial heat, a want that is frequently regretted by travelers and sojourners, especially such as have been accustomed to the overheated houses of the United States.

In houses of more than one story, the upper floor is always preferred as a dwelling, has the highest ceilings and commands the highest rents.

The ground floors are usually occupied as stables, store-houses, workshops, or as dwellings for the lower classes of the population.

There are no aristocratic streets or quarters in Mexico, the dwellings of high and low, rich and poor, being indiscriminately distributed over the city and very frequently found under the same roof.

Houses are sometimes rented entire, but more frequently in flats, or suits, here called "*viviendas*," and more rarely by single rooms, usually unfurnished. The terms are invariably stated by the month unless a longer tenure is secured by special contract.

A first-class house or flat may be had for from $100 to $200 per month, unfurnished. A *vivienda* with four or five rooms and kitchen costs from $40 to $75 per month; single rooms for lodging from $10 to $50; ground floors and "*entresuelos*" may be had much cheaper, and there are many tenement houses, one storied, where neat viviendas of three or four pieces may be rented at from $5 to $10 per month. Furnished houses, apartments, and rooms, out of the hotels, are rarely obtainable, and command prices from 50 to 100 per cent. greater than the same class of accommodations unfurnished.

Lodging rooms with full board may be had at the leading hotels and boarding houses at from $100 down to $25 per month, lights and attendance included.

There are restaurants and eating-houses of all grades, with a corresponding scale of prices to suit all classes of customers. I here insert a list of the principal hotels and restaurants:

Hotel Iturbide—Second Calle de San Francisco: $3 per day for transient visitors, special rates for permanent borders. At the French restaurant attached to this hotel, dinner at the *table d'hôte* costs $1. In the garden a private saloon, $1.50—good French table wine, $1 per bottle.

Hotel del Bazar—Calle del Espiritu Santo: Rooms, from $1 to $2 per day. Meals at the restaurant, 75 cents each—good table wine, $1 per bottle.

Hotel Nacional, Hotel del Refugio, hotel and restaurant San Agustin, Hotel San Carlos and La Concordia the great café and restaurant on Second Plateras street. There are also a number of handsome garden restaurants, called tivolis, in the suburbs of the city, which, on account of the uniform mildness of the climate here, are available at all seasons for public and private dinners, and are favorite resorts for strangers.

It may be remarked generally under this heading that the capacity of this city for entertaining strangers is very limited indeed and scarcely adequate to meet present demands; prices of lodging and living are continually advancing, and should the influx of foreign visitors increase, as it probably will, serious inconvenience will be felt in this direction.

HOUSE-KEEPING.

The markets of Mexico are abundantly supplied all the year round, with meats, vegetables, and fruits, but very irregularly and indifferently with fish and game. Those who are content with the varied and plentiful products of the country may manage to keep house with reasonable economy; but where the taste demands imported foods and drinks, living will be found very expensive. The cooking is done in brick ranges, with charcoal for fuel, and for the most part in earthen pots and pans of native manufacture. A full outfit of crockeryware for a kitchen may be purchased for 50 cents or $1 at most. Utensils of tin and copper are probably fifty per cent. dearer than in the United States. Earthen furnaces, kerosene stoves, and spirit lamps are used by individuals, but I have never seen an American cooking stove in use. They devour too much fuel, which is scarce, emit too much heat for the climate, and Mexican servants object to them as innovations.

Ordinary servants' wages range from $6 to $12 per month, good cooks,

from $12 to $20, but capable and reliable servants are very scarce, and it requires so many more hands to keep up an establishment that they are not economical. They are, however, usually very respectful in their manners and very simple in their mode of living, requiring only a few corn cakes and beans for food and a rush mat for bedding. Drunkenness and pilfering are common vices among them, but probably not more common than among the same class elsewhere. A good Mexican servant is a treasure when found.

The standard table meats, beef, mutton, veal, kid, and pork, are of fair quality, but inferior in flavor and condition to those usually served in the United States. Beef is most generally used, and is comparatively the best meat in the market. Kid is more commonly used than either veal or mutton, and forms one of the staple dishes on Mexican tables. The pigs are very fat, and are usually rendered into lard, which is of universal use in the national cookery. The lean meat is eaten fresh, and also made into sausages of very poor quality. The feet and heads are prepared and used as in the United States I have never seen cured hams or bacon of native production. The standard poultry—turkey, chickens, geese, ducks, and guinea fowls—are supplied plentifully, but are still more decidedly inferior to those of the United States.

The neighboring lakes furnish several varieties of small fish for the table, most of them insipid, a flat white fish being the best. The "huanchinango," or red snapper of the Gulf, brought from Vera Cruz, is the favorite dinner fish. The same market also supplies shrimps, crabs, oysters, and occasionally other varieties of sea fish, but these marine luxuries are scarce, costly, and not always attainable in perfect condition.

The vegetable market is always full and satisfactory, every month in the year furnishing an abundance and variety of fresh and succulent vegetables. Cabbages, cauliflowers, lettuce, green peas, tomatoes, potatoes, radishes, turnips, carrots, onions, beets, and others are to be had at all seasons. The green corn is inferior to that served in the United States, while the potatoes are both inferior in quality and comparatively dear. The Mexican beans (frijoles) are of excellent quality, very cheap, and are the staple food of the people, as well as the standard dish on all tables. There are also a number of other delightful edible vegetables and roots peculiar to the country, the names of which are unknown to us.

The fruit market like that of "vegetables" is perennial, every month furnishing its varied supply. All the fruits of the temperate zone, as well as those of the tropics, are here represented. Apples, peaches, pears, plums, apricots, nectarines, and cherries all appear in their season. Strawberries are sold during ten months of the year at 25 cents a pound. All northern fruits, including melons and grapes, grow prosperously on the table-lands of Mexico, and their inferiority in flavor and appearance to those of the United States, and especially of Upper California, is due rather to a lack of intelligence and care in culture and the slovenly methods of gathering and marketing. All varieties of tropical fruits are daily brought into the city from the "tierras calientes" on the backs of Indians and donkeys, and more recently by rail. Among these are the pine-apple, banana, orange, mango, chirimoya, fig, maguey, zapote, and many others unknown to the inhabitants of the temperate zones. These fruits are gathered and transported with so little care and judgment that they reach the market generally in very bad condition, and in any of the leading commercial cities of the United

States the principal tropical fruits may be had cheaper and better than in the city of Mexico.

Wild game is so scarce and fills so insignificant a place in the Mexican bill of fare that I have inadvertently omitted mention of it in its proper order. The lakes supply a few wild ducks, the best of which are the green and blue winged teal. A few partridges, or quails, doves, robins, blackbirds, sparrows, and snipe fill the list of feathered game. Rabbits and hares are more plentiful, and, I have occasionally seen "armadillos" and bunches of "iguanas" in the market, both of which are eaten and much esteemed by the Indians, but are seldom served on civilized tables.

Milk is plentiful and of good quality, and there is a good deal of inferior cheese manufactured in the country. Excellent butter is also made to a very limited extent. As butter is not used by the natives to the extent that it is by the people of the United States, the supply has been hitherto regulated by the demand created by foreigners in the city. A dry season and an unusual influx of strangers raises the price from 50 cents to $1 a pound, and it is often unattainable at any price. An excellent article of canned butter from Norway can be bought in the groceries at the same cost. Eggs are plentiful, and are sold at reasonable prices.

Mexican coffee is unsurpassed in quality. That grown in Colima resembles the Mocha in appearance, rivals it in flavor, and is, I believe, grown from the seed of the Arabian plant.

Sugar is marketed in large brownish-white loaves, coarse-grained and unrefined, but very rich in saccharine. It is sold also in dark brown cakes, which, dissolved in water, is used as molasses. There are no sugar refineries in the country, and the highly-refined grades of white lump, granulated, and pulverized sugars commonly used in the United States have not appeared here at all, until recently small quantities have been imported. Nor have I ever seen the golden and dark-brown grades in the shops.

Chocolate is the national and historic beverage of the country. It is manufactured everywhere from the native cacao nut, and from nuts imported from Central and South America, which are preferred. The salt sold in the vicinity of this city is coarse, impure, and very dear. Even when rolled and pulverized it would be considered unfit for table use in the United States. Fine white table salt is imported and commands high prices. Conserved fruits and sweetmeats of many varieties, called "dulces," are favorite articles of consumption among all classes of Mexicans, and are extensively manufactured for home use. Notwithstanding the abundance of material, and the dry atmosphere, which facilitates their production, these "dulces" and dried fruits are comparatively dear in the market.

The bread is excellent in quality and of great variety, but extravagantly dear, costing on an average about three times as much as in the United States. For this reason wheat bread is only eaten by the comfortable classes. The bread of the people is a cake called a "tortilla," made of Indian corn, ground by hand on a stone, and backed on another flat stone or sheet-iron plate. The tortilla is tough and tasteless, and not comparable with the varied corn-breads of our Southern negroes.

Ice is used here only as a luxury, and is not reckoned among the domestic necessities, as neither the climate nor the habits of the people demand it. Ice cream and water ices are served at the hotels and restaurants, and at balls and other public and private entertainments, but its use is unknown in ordinary housekeeping. On account of the exceptional dryness of the atmosphere at this elevation, meats and all

other provisions keep without a refrigerator. Bread, cheese, and other eatables never mold, but only spoil by drying up. From time immemorial the ice supply of Mexico has been drawn from the glaciers of the snow-clad peaks in sight from the city and transported on the backs of Indians and mules. Of late years Popocatapelt has found a competitor in the manufactures of artificial ice established in the city, which have reduced the price to three cents per pound.

The city is indifferently watered by two aqueducts built on arches after the ancient Roman model furnishing, respectively "aqua delgada," clear water, and "aqua grida," muddy water. This supply is conveyed by pipes to numerous tanks and open fountains located in all quarters of the city, from whence it is distributed for family use by a licensed corps of water carriers, whose organization and quaint uniform are relics of the early viceroys. Their charges are from two cents to ten or twelve and a half cents a load (representing about a third of a barrel of water each), regulated by the distance of the fountain from the place of delivery. This water is not considered healthy and scarcely potable unless filtered, and one or more filters of porous stone "destiladeras" form an essential part of the furniture of every establishment. During the dry seasons this supply diminishes to such an extent as to be sensibly insufficient for the needs of the population and the water carriers' tariff rises in proportion. To meet this deficiency all public and many private establishments have sunk artesian wells, finding good drinkable water at an average depth of from three to four hundred feet.

Next to water, and rivaling it in importance and universal use, comes the Mexican national beverage "pulqué," a drink made from the fermented juice of the maguey plant, and resembling in appearance and taste, a mixture of hard cider and stale buttermilk. It is esteemed a most refreshing and healthful beverage, and is commonly recommended by physicians for patients suffering from dyspepsia and general debility. Strangers usually do not relish it at first, but the taste is soon acquired and its refreshing and tonic qualities acknowledged. As it is quite intoxicating and nearly as cheap as water (costing about two cents per bottle in the city), it may be supposed that its use frequently degenerates into abuse among the common people.

From the same maguey plant is distilled "mescal," the common spirituous liquor of the country, a finer quality of which is called "tequila," from a town in the state of Jalisco, where it is manufactured. "Tequila" resembles a very delicate Scotch whisky in flavor, and is an excellent medicinal tonic and stimulant. It costs about $1 per gallon. "Aguardiente" is the generic Spanish name for alcohol and strong alcoholic liquors. Here the name is commonly applied to the crude and fiery distillations from corn and sugar-cane.

A variety of ales and beers of inferior quality are manufactured in this city and elsewhere in the republic. A sort of wine or cordial is also manufactured from the quince, which grows here in abundance, and great perfection. The juice sells at fifty cents per bottle, and is esteemed healthy.

In addition to the foregoing list of native products, the grocery establishments everywhere keep an extensive and varied stock of imported meats and drinks, a large proportion of which come from the United States. American canvassed hams, canned meats, salted fish, bottled beer and whisky are most prominent in the market, and are becoming more so from day to day. The supply of French, Italian, and Spanish wines is of greater variety and better quality than is usually found with us, and generally cheaper.

I here insert a priced catalogue of the leading articles of consumption, both native and imported:

Average retail prices of Mexican products.

Meats:		
Fresh beef	per pound..	$0 12½
Choice cuts	do....	25
Fresh mutton	do....	25
Fresh veal	do....	25
Fresh kid, sold by the piece, equivalent to	do....	25
Fresh pork	do....	18¾
Lard	do....	20
Fowls:		
Turkeys (equivalent to 15 cents per pound)	each..	$1 25 to 2 00
Chickens	do....	37½ to 50
Ducks	do....	18¾ to 20
Fish:		
Huachinango, red snapper	per pound..	70 to 1 00
Robalo	do....	18¾
White fish	per dozen..	25
Oysters	do....	37½ to 75
Groceries:		
Milk	per quart..	10
Butter	per pound..	50 to 1 00
Eggs	per dozen..	12½ to 25
Table salt	per pound..	6¼
Cheese	do....	25
Candles	do....	25
Sugar	do....	12½
Coffee	do....	25
Chocolate	do....	25 to 1 00
Vegetables:		
Frijoles	per quart..	9 to 15
Cabbage	per head..	3
Cauliflower	do....	12½ to 25
Potatoes, medium size, equivalent to	per dozen..	25
Potatoes, sweet, per arroba (25 pounds)		75
Tomatoes, medium size, equivalent to	per dozen..	12½
Peas	per pint..	25
Lettuce	per head..	1 to 2
Fruits:		
Strawberries	per pound..	25
Blackberries	do....	10
Apples	each..	1 to 6¼
Pears	do....	1 to 6¼
Peaches	do....	3 to 12½
Apricots	per dozen..	12½ to 50
Cherries	per pound..	25 to 37½
Figs	per dozen..	8 to 25
Oranges	do....	12½ to 50
Pine-apples	each..	12½ to 25
Mangoes	do....	3 to 12½
Cocoanuts	do....	10 to 25
Flour and grain:		
Flour	per pound..	12½
Flour	per barrel..	24 00
Bread, sold by the loaf at proportionate prices.		
Corn meal, not in the market, except imported.		
Rice	per pound..	9 to 12½
Average retail prices of imported provisions:		
American hams, in canvas	per pound..	40 to 50
American hams, cooked, in tin	do....	1 00
Westphalia hams	do....	62½
Devilled ham	per can..	75
American beef in cans of one pound		75
American salmon, cans of one pound		1 00
Same, half-pound cans		50
Mackerel (each 18¾ to 25 cents)	per pound..	22½
Herring	each..	12½

Average retail prices of imported provisions—Continued.

Baltimore oysters in cans		$0 50
Same, half cans		25
American asparagus, fresh, in cans		1 50
Codfish	per pound	25
Same, boneless, in boxes		50
Cheese, American, Swiss, English, and German	per pound	$0 50 to 75
Crackers	do	37½ to 50
Tea	do	2 00 to 3 00
Candles	do	31½ to 50
Petroleum, for lamps	per gallon	80
American whisky	per bottle	1 50
American champagne	do	2 00 to 3 00
Lager beer, Saint Louis, Milwaukee	do	44

The foregoing list might be prolonged indefinitely, but is sufficiently full and varied to indicate the standard prices in the market.

FURNITURE.

The cost of furniture in Mexico is considerably higher than in the United States, especially of elegant and luxurious articles, whether imported or of home manufacture. All grades and styles of furniture, from the most common to the most elegant, are manufactured in this country, the inlaying, moldings, and carving being all done by hand, and in some instances the materials imported from the United States, owing to the fact that there are no large stocks of seasoned woods in this country. Notwithstanding the advantages of artistic machinery, seasoned materials, and cheaper methods of production, American furniture cannot successfully compete with the home manufacture in this market on account of the excessive charges for transportation and duties, the aggregate of which amounts to 150 per cent. on the original sale price.

Common furniture here is more substantial and more serviceable, but neither as cheap nor so showy as the same grade with us. Plain wooden chairs with rush bottoms cost $16 per dozen; toilet stands, $4 to $8 each; plain yellow pine or cedar bureaus, $15; tables, $10; elegant chamber and dining-room sets cost from $500 to $3,000 per set. The best bargains in furniture can usually be found at the national "Monte de Piedad" and other pawnbrokers' establishments or at private sales. On account of the dryness of the atmosphere at this altitude, wooden furniture jointed, glued, and veneered has a tendency to crack, disjoint, and peel. The wood is also liable to the attacks of destructive insects. This, however, is not so common here as in the hot regions. The bedsteads are invariably of metal. Those of iron, painted, cost from $7.50 (single) to $40 each (first-class double). Brass bedsteads, plain and richly wrought and chased, cost from $50 to $250 each. Mattresses made of wool, curled hair, cotton, corn shucks, and Spanish moss are sold according to size, weight, and material at nearly the same prices as in the United States. Feathers for beds and pillows cost from 25 cents to 50 cents per pound, but the supply is limited and precarious. Bedding, such as sheets, blankets, and covers, costs about 50 per cent. more than similar articles in the United States.

CARPETING.

The inferior quality of the bricks of which the floors are made, makes it essential to comfort and neatness that they shall be covered with matting or carpets. A coarse matting of woven rushes and of palm leaves

can be had for about 12½ cents per superficial yard. Inferior carpeting of hemp and of maguey fiber costs about 50 cents per yard, and woolen carpeting of agreeable patterns and fair quality at $1 per yard. All these are of domestic manufacture.

Imported carpeting from the most noted factories of England, Belgium, France, and Turkey are sold at comparatively high prices. Oil-cloth costs $1.50 per superficial yard. Besides their historic manufactures of crockery and stone-ware, which are still in common domestic use throughout the country, the Mexicans manufacture an excellent article of white porcelain resembling the commoner grades of Liverpool ware, which is sold at moderate prices—plates $1.50 per dozen, cups and saucers $1.75 to $2 per dozen, vegetable dishes 50 cents to $1.25 a pair, pitcher and washbasin $1.50 to $2, full chamber set $2 to $2.50. They also manufacture glass-ware of a variety of forms and colors. Wine glasses and tumblers at 75 cents to $1 per dozen. The market is also supplied with the different grades of porcelain, glass, and plated wares from the United States, England, France, and Germany at prices averaging from 120 to 150 per cent. above the sale prices of these articles in the countries where they are manufactured.

HARDWARE.

I do not know of any manufactories of domestic hardware in Mexico; goods of this character are imported chiefly from the United States, and are subject to charges for duties and freights ranging from 130 to 200 per cent. on their original cost. The retail price of such articles here will be consequently, double, treble, and even four times as much as in the locality where they are manufactured.

CLOTHING.

The Mexican factories now produce a variety of cotton and woolen materials for clothing of excellent quality and improving in style and appearance. For gentlemen's wear a good working suit of Mexican cassimere, all wool, costs from $15 to $25. These suits are now generally worn by business men, being more comfortable and lasting, and but little inferior in appearance to similar styles of imported goods which cost from $25 to $35. Elegant suits of French or English cloths cost about the same as in the United States. Silk, woolen, and cotton underwear and the minor furnishings of a gentleman's wardrobe also cost about the same. Good shoes of Mexican leather from $1.75 to $2.25 a pair; shoes made of French or English leather cost from $3 to $5 a pair, from 30 to 50 per cent. less than similar articles in the United States. Imported shoes are also cheaper here than with us. Hats of similar grades also cost about the same; soft felt "wide awakes" at $2.50 to $4, Derbys $3 to $4, silk stove-pipe $5 to $8, plain Mexican sombreros from $3 to $5; the same ornamented with silver and gold lace, &c., cost from $5 to $50; sombreros are also made of straw and palm leaves at prices ranging from 16 cents to $25 each.

The women of the poorer classes are clothed altogether in the domestic fabrics of cotton and wool, blue and striped cottons, printed calicoes of varied and tasteful patterns, at from 12½ cents to 18¾ cents per yard, and hand-woven shawls ("rebosas") from $1 to $10 each, according to style and quality.

The comfortable and wealthy classes dress almost universally in imported goods, chiefly French, and according to European fashions.

Ready-made clothing is imported from Paris of the most elegant and costly styles, and most of the minor articles of a lady's costume and toilette are Parisian. The retail shops and bazars of the capital glitter with jewelry and ornaments of all varieties, from those of massive gold and gems of the first water at fabulous prices to those of tinsel and colored glass sold for a few cents.

Between the extremes, a modest and economical lady's wardrobe will cost here about 50 per cent. more than the same style in the United States. This, however, is modified by the climate, which requires no changes of fashions to suit the seasons, and the same outfit is equally appropriate for every month of the year. Washing is done neatly and at moderate prices, but the washerwomen of the city persistently reject the American washing machine, and continue to use the traditional, coarse-grained flat stone, which destroys the clothes very rapidly.

CONDITION OF THE CITY.

The city is lighted in some quarters with lamps of gasoline or petroleum; other quarters, public buildings, hotels, and offices, with gas of inferior quality, and latterly the principal square and adjacent streets with the electric light. For domestic light, stearine candles, and kerosene oil are universally used. There is considerable luxury in lamps and chandeliers, which are comparatively costly. The favorite German student lamp, which sells in the United States, for from $6 to $8, costs from $16 to $20.

In conclusion I may add that the city is clean and orderly, having a uniformed police, which is polite, vigilant, and efficient, and a system of street and suburban railways which is as cheap and convenient as could be desired. Its opera-houses, theaters, and places of recreation compare favorably with those of other cities of its class; its medical faculty is distinguished for skill and high character, and charges for medical attendance are moderate; its schools and colleges are numerous, well conducted and appointed; while its bathing establishments are so numerous, varied, and luxurious, that their description will furnish interesting material for a future report.

In treating the subject of the present paper, I have entered into cubical detail on many points, not so much for the special value of the information presented as for the suggestions offered to American enterprise, by the introduction of new ideas and superior methods, to improve and cheapen the materials of living, a work which must result in incalculable benefit to both countries.

DAVID H. STROTHER,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
Mexico, April 15, 1882.

THE DWELLINGS OF THE WORKING CLASSES IN SCOTCH CITIES.

REPORT BY CONSUL HARTE, ON THE CUSTOM IN SCOTCH CITIES OF SELLING TENEMENTS OF WORKMEN'S DWELLING-HOUSES, IN FLATS OR FLOORS.

I beg to call the attention of the Department to a certain local custom which obtains in this district of acquiring *absolute* and *permanent property* in floors, apartments, or other divisions of dwelling-houses.

As it seems to offer, in some part, a solution to the problem submitted

to all densely-populated cities where land is too valuable to allow of the construction of small dwellings, and flats or floors in larger lodging or tenement houses are used for the purpose, it may be of interest to know how these flats, or floors, can be *bought* instead of being leased or rented, and how people of limited means may become proprietors of a floor or even a half floor in a building. Believing that this peculiar custom is comparatively unknown to a majority of the people of the United States, and that it has not yet been presented to the consideration of the Department, I venture to submit as briefly as possible the following facts:

In cities such as Glasgow and Edinburgh the building and disposing of dwelling-houses for the working classes generally proceed as follows:

A builder acquires a piece of ground on which he intends erecting a large building of dwelling-houses. He acquires the ground on condition of payment of an annual rent, or, as it is called in Scotland, "feu" duty. Plans are prepared showing the situation the building is to occupy, the entrances to the various apartments, the size and ventilation of the sleeping apartments, and the system of drainage proposed. The plans must also show minutely the dimensions and levels to be observed in the erection of the building. These plans are submitted to the authorities having the supervision of the erection of buildings, called in Scotland the Dean of Guild Court. If the court approve of the plans, and are satisfied that all sanitary requisites are provided for, they authorize the building to be proceeded with. Officials are appointed by the court to inspect the building while in course of erection, in order to make sure that the plans are being complied with.

The building being completed, the proprietor *sells* it in flats or half flats to suit the requirements of purchasers, precisely as the same accommodation is rented in other cities. These flats or half flats are approached by a common stair, generally entering from the main street, and have doors entering from this stair. The prices of these flats necessarily vary according to the size and accommodation and the style in which the building has been put up. In selling or "giving off" these flats to the various purchasers, the party selling, in the conveyance by him, gives the purchaser a right, in common with the proprietors of the other portions of the building, to washing, green, and cellarage accommodations, provides for a right of access by the common passage and stair, and also stipulates that in addition to payment of the price he will relieve him of the proportion of taxes and public and local burdens applicable to the purchase, and will also relieve him of a portion of the "feu" duty payable for the ground on which the building stands, calculated according to the value of the purchase. It is also generally stipulated in the conveyance that the premises are to be occupied as dwelling-houses, and that the purchaser shall bear a certain proportion of the expense of upholding the roof of the building, and of keeping in repair the pavement, railings, causeway, water-pipes, and common sewers. The purchasers having paid the price and undertaken the other conditions of the sale, become absolute freehold proprietors of their respective flats, and can sell, let, or mortgage, as their necessities require. To enable the government authorities to fix the taxes and public burdens applicable to each flat, they employ officers to inspect them, put a valuation on each flat, and on the valuation so fixed the taxes are levied.

With regard to the rights of the various proprietors in the whole building, the property of the building cannot be said to be entirely divided; the roof remains a common roof to the whole, and the area or piece of ground on which the building stands supports the whole. When the various stipulations referred to are carefully inserted in the titles,

questions are not likely to arise. The failure to have the various rights, privileges, duties, and obligations of the different proprietors specified in their titles has, however, been a fruitful source of litigation, especially when the property in course of time becomes available for business purposes, and the proprietor of the lower floor wishes to alter the character of his premises. It has been held that in the absence of stipulations in the titles to the contrary, the proprietor of the ground floor must uphold it for the support of the upper, and the owner of the highest story must uphold that as a cover to the lower. Where the highest floor is divided among several proprietors, each proprietor is obliged, according to this rule, to uphold that part of the roof which covers his own portion of the flat. The nature of the rights of the several proprietors, however, is not in all points settled. The character and extent of each proprietor's rights seem to depend both on his titles and on the original construction of the whole building. Each proprietor has an interest in the *solum* (or ground on which the building stands), the gable (or main division wall), and in the common stair and walls inclosing it, which entitles him to prevent any alterations thereupon which may affect the safety, or even the use and enjoyment of his separate estate.

In conclusion I have the honor to report another custom equally peculiar, which is, however, a great drawback to the middle classes in Scotland becoming proprietors of their own houses. It is the heavy expense attending the conveyancing or mortgaging of real estate. A conveyance of a house worth, say, £200, will cost from £6 to £10, and a mortgage of, say, £150, will cost about the same. In large purchases the expense generally is from 1½ to 2 per cent. on the purchase price.

BRET HARTE,
Consul.

UNITED STATES CONSULATE,
Glasgow, May 4, 1882.

MANUFACTURE OF AGRICULTURAL MACHINES IN RUSSIA.

REPORT BY CONSUL GENERAL STANTON, OF ST. PETERSBURG.

Herewith I have the honor to transmit a translation of an article on the manufacture of agricultural machines and implements in Russia which recently appeared in the Russian Review.

The article is interesting as showing the condition of an industry whose development in this country cannot be a matter of indifference to the United States. It is the aim and hope of the Russian manufacturer to supply the wants of the Russian people with Russian-made goods, and however laudable this effort is, years must elapse before complete success attends it.

The whole paper shows the primitive character, not only of this industry—which has to contend against a strong foreign competition, a lack of capital and skilled laborers, an unfavorable money market, and a limited demand—but also of agricultural pursuits in general.

It is in this century a strange spectacle to find an almost exclusively agricultural country, possessing over 80,000,000, inhabitants, consuming annually not more than $3,000,000 worth of agricultural implements. But such are the existing conditions that it is hardly possible for matters to be different, and, all things considered, it is a matter for surprise that the progress made should be great as it is.

During the period of serfdom a superabundance of rich soil and laborers induced a careless and wasteful system of agriculture whose baneful influence is still felt among the peasant classes.

The reorganization of these classes is a problem which the government has long been seeking to solve, one of a nature so complex as to present infinite difficulties and thus far to elude anything like a satisfactory solution.

If an ultra simplicity and the restriction of all wants to articles of the merest necessity were indicative of the perfection attained by a nation, then Russia is indeed a Utopia, for among civilized nations it would be difficult to find a people with greater simplicity and fewer wants than the Russian peasant classes.

But this very absence of all wants is one of the greatest obstacles to the development of manufacturing industries, and in my opinion precludes the hope of great industrial progress until the people have been educated to have other wants than those which the possession of a sheepskin coat, top boots, and a few yards of coarse cotton cloth can satisfy.

The dearth of money, when so great that an association must be formed to enable a peasant to purchase a $30 plow, must also obstruct the industrial progress of a nation.

The managing director of one of the largest iron foundries in South Russia writes as follows:

We employ from 500 to 800 hands, and used to make horse and steam thrashing-machines, portable engines, fire-engines, plows, &c., as long as we had iron free of duty, but since this privilege was taken from us, January 1, 1881, we and all our neighbors were compelled to abandon this branch of industry. Hands are far dearer here than abroad, or even in St. Petersburg, and, since agricultural machinery from abroad enters free of duty, there is no possibility of competing. In reaping and mowing machines we do a good business with America, importing from 800 to 1,000 machines yearly. I cultivate mostly the Johnston harvester. As to portable engines and thrashing-machines, I prefer the English make—Clayton and Shuttleworth. They are far dearer than the American ones, but also stronger and more solid.

This letter corroborates the statement of the inclosed report, and shows that high-class machines cannot be produced as yet in Russia. They are almost exclusively imported, and I have no doubt but that the American manufacturers could increase their share of this import by studying the wants of this country, and by the establishment of local agencies.

EDGAR STANTON,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
St. Petersburg, March 2, 1882.

[Inclosure in Consul-General Stanton's report.]

THE MANUFACTURE OF AGRICULTURAL MACHINES IN RUSSIA.

[Translated from the December number of the Russian Review for 1881.]

During the last two decades the number of factories in Russia engaged in working up all kinds of metal has greatly increased.

In 1860 there were 106 in operation, with a total production valued at $3,750,000; in 1868, 124, with a production valued at $8,500,000. Ten years later, we find that Mr. Skalkofsky, subdirector of the department of mines, in his report on mining and metallurgical industries, counts up not less than 931 factories, producing, with 79,536 laborers, $43,500,000 worth of goods.

Such an increase is, under any circumstances, astounding, and particularly so when, as we shall soon see, the last-mentioned statement does not express the reality. For

instance, among the 931, 206 factories are stated as producing machines, instruments, and arms; but, according to the special report of the minister of domains on the extent of the manufacture of agricultural implements, the number hereof is over 300.

It is probable that this great increase is more apparent than real, and results most likely from the fact that the returns are now more accurately made than 20 years ago.

Formerly many establishments may have preferred not being named, and doubtless many of the smaller works were not considered worth mentioning; whereas now, among the 931 factories, there are 154 locksmiths alone.

Among the various branches of the metallurgical industry the manufacture of agricultural implements takes a prominent position. As usual the incentive to the development of this branch of trade was given by the urgent necessity therefor so peculiar to agricultural countries.

The present condition of Russia's agriculture renders the adoption of a better system more and more urgent, whilst the instinct of self-preservation demands a more practical cultivation of the soil.

This can be obtained only by the more extensive employment of labor-saving machines, implements permitting of greater productivity.

Accordingly the import of agricultural machines increases from year to year, and but for the intervening war the increase of the last five years would have been greater than it is.

According to the reports on foreign commerce the import of agricultural machines was as follows, viz:

In 1870	$435,000
In 1871	520,000
In 1872	760,000
In 1873	770,000
In 1874	1,400,000
In 1875	1,578,552
In 1876	814,032
In 1877	615,565
In 1878	1,820,718
In 1879	1,999,931

And that of 1880 and 1881 is not inferior to these amounts.

The official organ of the Government of Karkoff recently wrote, "In no year have there been in Southern Russia as many agricultural machines and implements sold as in 1881. Many warehouses have sold almost their entire stock. Good crops and the constantly increasing demand for more perfect agricultural implements are the cause of this gratifying event."

The greater part of these machines was of foreign origin.

The fact that the use of agricultural machines is at present more wide-spread than formerly, is testified to by others also. Machines are employed in New Russia as well as in Karkoff.

It is seldom that a German colonist in Molotschansk, with 109 acres of arable land, does not possess a mowing machine, and he finds that it pays even though the machine works but five or six days during the year.

The crops can be harvested at the right time, and that is saying a great deal in a land where a day's delay may prove disastrous, particularly in the cultivation of summer wheat, which is very general.

These machines are also spreading among the Little Russians. In the districts of Melitopol and Yekaterinoslaff they are to be found in almost every well-to-do village.

The Little Russian has the habit, after finishing his own harvest, of assisting his neighbors by cutting their grain with his machine in consideration of a previously-arranged compensation.

These are not the only machines in use here. The fanning machine, and subsoil plow, are also most widely used. The latter costs about $30, and, drawn by four or five horses, plows as much as 13 acres a day to a depth of from five to six inches.

The poorer peasants unite in forming an artel—a sort of mutual-benefit society—for the purchase of these machines.

The frequent holdings of agricultural exhibitions have unquestionably contributed to this change of opinion, which has been encouraged not only by the introduction and exhibition of new machines and implements, but also by the distribution thereof as prizes and presents.

These practical institutions have given our farmers the opportunity of becoming acquainted with the products of modern technics, and of convincing themselves of the applicability of machinery even in agriculture. A number of exhibitions were instituted solely with a view to imparting this information.

From 1869 to 1880, thirteen exhibitions of agricultural implements and machines were instituted, and in 1881, in July, an exhibition was held in the town of Bielaya-

Zerkoff, in which the best peasants, *i. e.*, those whose farms were best cultivated, were presented with the plows of the newest construction.

It cannot, therefore, be denied that better ideas are gaining ground among agriculturists. The deeper they penetrate, the greater the demand for more perfect tools and machines, the more important will it be for us that the home industry be sufficiently developed to supply the demand.

The import of foreign machines is burdened with the cost of transport and commissions. The wide spread employment thereof is consequently prevented to the prejudice of the country. We are, however, fortunately in the best way of helping ourselves.

Our manufactories of agricultural machines are, it is true, not yet in a position to supply the entire demand, but they show themselves thoroughly capable, and are improving from decennium to decennium.

This progress is plainly shown in the reports of two committees sent by the department of agriculture to examine the condition of manufactures in 1875 and 1880.

Instead of 205 factories, with 6,778 laborers in 1875, we have, in 1880, 340 factories, with 8,802 laborers.

The following table shows the distribution of the factories throughout the various governments:

Governments.	Number of works.		Number of stands.		Value of production.	
	1876.	1879.	1876.	1879.	1876.	1879.
					Roubles.	*Roubles.*
Warsaw	8	11	1,058	822	351,562	571,695
Vilna	.....	2	.....	154	3,000	4,800
Volhynion	9	11	152	250	43,420	47,355
Voronesh	3	8	132	158	18,403	68,925
Don Cossack Land	1	1	69	112	30,000	30,000
Grodno	6	5	65	80	17,393	15,045
Yekaterinoslaff	6	12	136	458	179,590	420,038
Kalish	10	14	182	343	80,082	163,360
Kaluga	2	1	230	200	23,157	229,451
Kief	3	12	203	584	105,143	144,666
Koona	2	3	109	276	61,085	116,921
Courland	2	4	88	305	88,800	80,800
Coursk	8	4	100	102	37,040	38,750
Kieltze	4	4	34	109	23,505	26,250
Lomsha	2	3	27	23	5,757	7,839
Liefland	6	6	552	366	241,925	253,943
Leyublin	9	9	129	205	77,894	140,961
Minsk	6	9	28	99	23,690	30,932
Mogileff	1	1	14	47	1,900	3,040
Moscow	6	4	453	356	199,444	327,000
Nijnii-Novgorod	3	2	33	29	1,722	8,896
Novgorod	1	1	100	36	2,514	4,890
Orel	8	7	371	406	26,436	76,336
Pensa	7	6	96	289	57,000	64,507
Peterkoff	6	5	141	156	13,406	16,406
Plotzk	2	2	104	46	38,080	40,849
Podolien	2	4	12	38	3,306	5,930
Poltava	5	7	111	209	61,613	57,334
Radom	8	8	105	312	32,159	78,406
Riasan	11	112	176	444	24,496	70,670
St. Petersburg	3	4	81	29	59,000	40,200
Samara	3	4	14	61	30,000	75,000
Saratoff	4	7	50	165	21,225	37,305
Simbirsk	5	6	84	181	42,415	63,698
Survalki	3	4	81	88	15,435	47,762
Siedletz	1	3	6	129	8,260	33,200
Taurien	1	1	33	41	19,425	13,601
Tamboff	7	10	215	60	17,290	114,436
Tver	.....	1	.....	18	500	500
Tula	1	5	52	112	44,585	63,085
Ufa	.....	1	.....	48	4,500	5,000
Karkoff	5	5	141	279	53,355	129,545
Kerson	9	9	454	238	50,708	92,610
Tshernigoff	2	2	53	49	8,622	21,408
Esthonia	3	2	163	132	83,810	98,385
Yaroslaff	3	3	21	6	2,900	800
	205	340	6,778	8,802	2,374,782	3,980,622

The Polish governments distinguish themselves the most. More than a quarter (24.30 per cent.) of the total production falls to them. Agriculture stands higher here than elsewhere in Russia, and more machines are demanded. No city in Russia has

so extensive machine shops or so widespread a trade in agricultural machines as Warsaw. The oldest Russian firm, founded in 1818, exists here.

The next most productive districts were the governments of Moscow, Kaluga, Tver, and Yaroslaff, which participate with 14 per cent. of the total production. Here it was not so much the total demand for agricultural machines caused the development of the industry, as the convenience of the situation for the Black Earth and the Volga provinces. Among these establishments are the Wilson works, the oldest in the empire, having been established at Moscow in 1802.

Wilson, an English emigré, was the first one to introduce threshing machines into the interior. He built the first one in 1802-1803 for a landed proprietor in Tula, and many a later factory is indebted to him for the education of their foremen.

The third position is occupied by the Baltic provinces, which participate in the production with 11.10 per cent., manifesting, in comparison to the superficial area, a very great activity. Agriculture is tolerably advanced here, and explains the not inconsiderable demand for agricultural machines, which, in part, is met by the import of foreign manufactures.

In Riga, there are four tolerably large warehouses, and the large machines, such as steam threshers, portable engines, &c., are largely used here.

It should be mentioned here that the number of the factories has not in reality increased 135 during the four years. From 1876 to 1879 not more than 50 new firms were established. The remaining 85 result from the more careful enquête instituted by the department. But even then the increase is considerable, about 12 per annum, and testifies to a growing demand.

The omission of so many factories in 1875 is due to the fact that in many governments the manufacture of agricultural machines is a house industry plied by the peasants. Thus, for instance, the well-developed machine trade in the government of Riasan; the first census report 11, the last 112 factories. Accordingly there was 33 per cent. of all factories in this government.

Of these 112 few are entitled to the name of factory, being in general small workshops, in which threshing machines especially are made. In the town of Saposhok, for instance, there are but 21 master workmen, the remaining 91 being scattered through the villages of the province.

Precisely this miniature industry, however, has the greatest influence in extending the use of the machines. In 1879, those 112 workshops produced 622 machines, valued at $36,000. They are sold at from $40 to $150, and are largely bought by the peasants.

To effect their sales the peasant manufacturers proceed with their wares to the various villages, where they engage themselves to thresh the grain; and this undertaking generally ends in a sale, since the peasants have ocular demonstration of the usefulness of the machines.

Of the 340 manufactories, 196, or 58 per cent., work with hand, 100 with steam, 38 horse, and 6 with water power, which shows on how small a scale much of the trade is done.

The circumstance that but 104 of the 340 establishments have iron foundries also betrays the partial development of the industry.

The keeping of a large stock of castings necessitates a larger capital than most works possess, and when the stock on hand is exhausted the making of simple castings at remote foundries entails a loss of time and money.

The lack of foundries seems, however, to be owing as much to the scarcity of founders as money, for there are many instances where small works have them, and larger and more important establishments are without foundries.

The style of goods made also evidences a youthful industry, plows, harrows, straw-cutters, fan-mills, sowing and threshing machines being the principal articles made. Drill sowing machines have to be imported. Mowing machines have begun to be made. Hoes, rollers, drill-plows, &c., take a secondary position in the list of manutures. Other machines are seldom made.

Quantitatively the production has greatly increased. In 1876 25,835 machines were made, and in 1879 47,892 machines of all kinds, 48 different sorts being mentioned.

The value also has greatly increased. In 1876 the total production was valued at $1,187,391; in 1877, at $1,381,536; in 1878, at $1,601,896; and in 1879, at $1,990,311. The increase is slow, but steady, and perhaps in this gradual development is to be found the best guarantee for its permanence.

A comparison of the imports and home manufactures results favorably for the latter. The average annual value of the machines made during 1876-1879 was $1,540,284, that of the import during the same period $1,312,562, giving an annual excess over imports of $227,722, the excess for the four years being $910,891.

It should, however, not be forgotten that the term agricultural machine is strictly defined in the list of imports, whereas the meaning in the list of manufactures is not nearly so restricted.

In a report to the minister of domains, Mr. Tschernyayeff says: "Our agricultural machine industry, though not in a brilliant is in a tolerably satisfactory and by no

means a hopeless condition, such as many uncalled-for defenders of it describe, who see in protection the only means of developing it.

"The production of agricultural machines increases each year in a natural manner, and is constantly improving itself, progressing slowly but surely, and needs neither protection, advances, nor subsidies."

One must agree with those words, for as long as so many machines must be imported from abroad a protective duty would affect injuriously both farmers and the empire.

Manufacturers are nevertheless not content, and seek to obtain an increased rate of duty, even as much as 1 to 1½ roubles (50 to 75 cents) per pood. The government, however, seeks to assist the industry in other ways, and is not inclined to listen to the project of the protectionists.

The development of the trade has many obstacles to encounter. The home industry is not surrounded by the same favorable conditions as its foreign colleague. There is a lack in the first place of properly educated men; managers, overseers, and foremen are difficult to obtain, and steps should be taken to insure the education of capable and practical men.

Again, where the better management of the trade is guaranteed the necessary number of common laborers is wanting, and the unsatisfactory condition of the labor question becomes apparent, which cripples the whole machine industry.

The many holidays reduce occasionally the working time to 4 days in the week. Manufacturers must consequently employ 30 per cent. more workmen than they actually need. Many laborers break their contract and leave their work unfinished, whereby the manufacturer is unable to deliver his goods at the promised time. This has led to the employment of apprentices instead of adults, who form in some factories from 30 to 40 per cent. of all hands employed.

But little is gained thereby. Apprentices spoil much material by their unskillfulness, and produce but an imperfect article.

Under these circumstances it is hoped that a general law, which is already a long time in course of preparation, will soon be promulgated which shall regulate the relations of employer and employed, and furnish the former certain guarantees against the excesses of the latter.

A third obstacle is the irregularity of the railways, the complaints against which are not confined to this industry alone, but all are loud in their complaint, although the agricultural machine trade suffers, in all probability, more than any other. The products, which demand a careful handling, are delivered in an injured condition, and the inadequate allowances for damages can only be obtained after infinite trouble and exertion. High freight also enhances the cost and obstructs the sale of the machine.

There are also other obstacles which are more difficult to overcome. The cost of production, in comparison with that of foreign manufacturers, is greatly enhanced by the expensive building it was necessary to erect by the dearness of raw materials.

Iron and cast-iron must be imported under high duties and a depreciated currency, and even wood, an indispensable article in the manufacture of these machines, can hardly be procured in the necessary state of dryness.

The auxiliary industries being but imperfectly developed renders the production of large stocks impossible, few firms having the necessary capital to lay in enough raw material, and, as a consequence, the largest factories, in years of unusual demand, are never able to meet it.

In consequence of the scarcity of capital, manufacturers were induced to petition the Imperial Bank to open credits for them in its various dependencies, but the unfortunate results of similar experiments in former years led the government to refuse the request of the petitioners.

Although all hope of government subsidies is lost by this decision, the lack of capital can be made good in other ways. Manufacturers can best assist themselves by a prompt and accurate execution of their orders. There is no doubt but that the intention to deliver promptly and accurately would be greatly aided by the guarantee of a regular demand, and to insure this the ministry of domains might consistently assume the character of a purchaser. It could order a certain number of machines annually for its own estates, for various agricultural institutions and schools, for distribution at exhibitions instead of premiums, and thereby greatly assist the industry.

It would also enlarge the demand were local banks to accord farmers special credits for the purchase of machines, as is done in Poland. Poland has a regular system of such credits. The petitioner applies to the chief of his district for a certificate of qualification, which must exhibit, besides the name of the owner and farm, the particulars of its extent, the amount of the annual taxes thereon, of the title and right to mortgage the amount of mortgage thereon, amount of insurance, &c. In short, the character of the owner and the security he offers must be thoroughly investigated. If the result is favorable the bank advises the petitioner and the nearest manufactory of the credit allowed. On the strength of this the machines are delivered, the bank paying therefor and regarding the machines as mortgaged to it.

From 1833 to 1877 the Bank of Poland lent in this manner $2,477,500. From 1875 to 1879 196,254 persons received such advances, and the bank advances annually nearly $50,000 for such purposes.

The success which has resulted for Polish agriculturists from this system has induced many Zemstovs to take the matter in their own hands.

The government has also been petitioned to facilitate the sale of machines by the establishment at its own expense of warehouses throughout the empire, wherein a large stock of machines should be kept.

Such establishments are doubtless a necessity, but should be left to private enterprise, and, in fact, exist already in all the larger towns and cities.

Agricultural exhibitions have already done much to develop the trade, and more frequent repetition of the organization can do still greater good.

There are also other means too numerous to mention for developing this branch of industry, and, after considering the more important, there can be no doubt but that an industry is arising in our midst which justifies the greatest hopes for the future.

THE ANGLER CATTLE OF DENMARK.

REPORT BY CONSUL RYDER, OF COPENHAGEN.

I have the honor to transmit subjoined a report on cattle of the Angler breed in Denmark.

A woody landscape, with comparatively small fields, surrounded by sheltering live hedges; a fertile, genial soil, with good grass growth, and cattle, which, from remote times, have always been raised for their milking qualities, with a full ignoring of meat production, and, in former times, with a contracted breeding increase; as also a sparse winter foddering, and finally a certain care taken by the population in watching over the good descent of the cows on the mothers' side; these are the chief points from the influences of which the Angler breed has been formed. There may have been other causes of which I am ignorant; for example, a special quality of soil and grass which might have exercised this interweaving; but to allow that the Angler breed springs from doubtful crossings in remoter times; that the breed sprung from English cattle which one of England's kings had presented to his sister, the dowager duchess of Holstein, is not needed to show their peculiar qualities. A close observation will show that the same causes which in these days keep up the Angler breed can be accepted as having been sufficiently potent in course of time to form the breed.

As the most prominent features of the better class of animals, may be mentioned a fine, and, considered as milking cows, a regular construction of bone, to which may be added a somewhat small and delicate head (with long lower jaw), also fine, white, slightly up-curved horns, a lean and rather angular body, thin, fine neck, a fine and frequently a loose, smooth skin, and finally well-developed milk organs, and, as a rule, large hind quarters. The Angler cow, as compared with the island cattle of this country, may be considered as under the average size.

According to reports, the weight of a four-year-old bull or five-year-old cow averages 750 to 800 pounds, which may, however, be considered as somewhat high. These well-known features of structure in the Angler cows are in such close connection with the general life, conditions of the race that in all chief respects they easily allow of being guided thereby.

Owing to the great stress laid on the milking properties of the cow, and to the fact that the offspring were either sold at a young age for breeding purposes or as lean cows for grazing for the promotion of the milking qualities, the cattle movement for the meat production as a general trade has not exercised any important influence on the development

of the race, as has been the case in Jutland. The effect of this tendency to form families and races, which is very general in Angeland, must not be estimated too lightly, for it has been the means of keeping the good stock together. In the Angler breeding the greatest importance is attached to the cow and the least to the bull. The bull here is always young, but this has both its weak as well as its strong sides in land husbandry.

The cattle interests in Angeland have thus in full measure reaped the benefit from the breed having stood ready and fully developed when the demand of the present day for improvement began to make itself felt, as the neighboring countries to a large extent have sought it for breeding; it is only the Dutch cattle which in that respect offer opposition to the Angler breed. When the Angler breed was first introduced into the country can scarcely be stated with any certainty.

The oldest known Angler herds date from thirty to forty years back, but it is possible that the importation took place earlier than that in the island of Fyen, which was at that time the highway for cattle from South Jutland to the islands and to Copenhagen. Even if the chief part of the cattle which came that way were from North Schleswig and Ballum, still it may be supposed that some Angler cattle may have followed the stream. This importation has gradually become very considerable.

Although there have naturally occurred several crossings with the allied groups of cattle in the islands, still it comes probably nearer the truth if one considers the extension of the Angler breed to be due more to the introduction of the cattle on the spot than to crossing therewith.

The cattle census of this country shows very plainly what part the Angler cattle play, not only in the islands, but also in Jutland.

On taking the census there were ascertained to be of Angler bulls and bulls of native breed as follows:

Districts.	Anglers.	Native races.
1866.		
In the islands	1,961	10,894
In Jutland	266	4,833
1871.		
In the islands	1,961	7,907
In Jutland	266	4,208
1876.		
In the islands	2,380	7,091
In Jutland	300	4,876

This increase of Angler bulls was stationary in the first five years, but from 1871 the breed of Angler cattle makes a rapid progress, whilst the foddering at the same time becomes more plentiful, and the requirement for a larger milk yield is awakened. On the islands the Angler bulls have increased in the last five years 21 per cent., and in Jutland 13 per cent. With this expansion it cannot be doubted but that the race has been introduced unadaptable into districts. Accustomed to sheltered fields in its native home, and delicate of structure, it naturally calls for attention and care in its treatment. But it has also been shown that it can thrive well and increase its milking powers, even in a severe climate, when it at the same time it receives a continued, liberal, and regular course of feeding the whole year round.

When one is unable to bestow such nourishment on the Angler cattle, it would be advisable not to keep them; because, just as they are able to make a return for their liberal keep, they are liable to recede where the soil, climate, and natural conditions are unfavorable. Not only do they fall off in their milking qualities, but they sink under attacks of consumption.

When the breed of Angler cattle began to be cultivated in this country, strong nourishing fodder was far from being common, and even on the larger estates much less fodder was given than in later times.

The ruling principles in breeding were to preserve, and to further develop the fineness in the Angler breed, and mainly from a scanty feeding, and from the early stage of calving of the young cows this fineness was at times carried to a dangerous extent. Gradually, however, a reaction took place in this respect, and subsequent to the agricultural meeting in Copenhagen in 1869, there commenced a demand for greater body development, whilst at the same time a more liberal foddering became general. But it was also shown that the Angler cattle did not disown their natural thriving tendencies, for the breed by degrees willingly submitted to the new requirements demanded of them, and even in such herds, where most advancement had been made in the direction of fineness, but where, however, health had been preserved, good results could be obtained.

These movements in breeding the Angler cows, and the results therefrom in later times, are contrary to the belief that when the necessary fineness has been reached in any productive breed, and become a sign of race or descent, that then a very considerable structural development, both as regards body and bone surface, and therewith a corresponding life existence may be given to the animal without any sensible loss therefrom in fineness, whilst the producing properties are increased at the same time. Sufficient attention has not always been given to these points, and those who have either received their views of the Angler breed from the period when the general desire was for elegance, or from those herds of the present day, where they pertinaciously hold to the same, and who have scarcely paid attention to the movements of the last 10 years in the advanced herds of the country, can yet be astonished at what they have noticed in the fineness and so-called one-sided consequences in dairy thrift. In those parts of this country, where one only in the later years has begun to understand what dairy thrift really means, it has been very hard for them to get rid of the scare which the remembrance of bygone days associated with the ideal of a good milch cow.

The above-mentioned experience in regard to the development of the fine Angler breed in the last ten years will, however, without any doubt, soon help to dissipate this scare once for all. Even if it be taken for granted that the Angler cattle in their native home have, as before stated, a weight of 750 to 800 pounds each, which calculation is from 1877, and thus included the progress, small as it is, which the Angler breed has made even in its native home, still this weight is probably not a little above what the fine Angler cattle weighed from the year 1860.

But even if one goes out from 750 to 800 pounds for a five-year-old cow a considerable increase in weight can be seen in the Angler cattle now in this country.

For the year 1881 the following weights have been given of Angler cows on a Danish farm, namely: 17 head of cows, 6.5 years old, that had calved, weighed 912 pounds per head; 14 head of cows, 7.4 years old, that had not calved, weighed 1,058 pounds per head; three-year-old heifers

weighed 820 pounds per head; two-year-old heifers weighed 798 pounds per head.

Gabel places the milk yield of an Angler cow of 750 to 800 pounds at 2,300 to 2,500 litres of milk;* that is to say, to about 6 to 6.2 pounds milk per pound weight of body. It is not stated what the above-mentioned 17 cows that had calved yielded of milk in the year, but it is pretty certain that any 17 head of six-year-old cattle of the farm's herd will yield much more during the year, and which would be equivalent to 6.2 times of their weight of body.

If the average weight is taken of one to two-year-old and of two to three-year heifers, together with that of the 17 cows, which probably will not be far from agreeing with the proportions between the older cows and the heifers on the farm, an average weight of 838 pounds will be obtained, and which for an average milk product in the year for the whole herd of 6,100 pounds will give a proportion of about 1 : 7.2.

Thus there is not only a considerable increase in weight of body, but also in absolute and relative yield of milk. Even supposing that the herd on this farm is somewhat superior to those on others, it still does not weaken what has been maintained, as most surely the greatest part of the Angler herds in this country will be able to show a similar, even though it be a somewhat smaller progress.

HENRY B. RYDER,
Consul.

CONSULATE OF THE UNITED STATES,
Copenhagen, April 20, 1882.

BRAZILIAN RAILROADS AND COFFEE.

REPORT BY CONSUL WRIGHT, OF SANTOS.

Herewith inclosed, marked A, I beg leave to hand you a slip cut from our newspaper here showing the receipt and expenditures of the Trunk Railroad from here eighty and eight miles to the town Jundiahy, and about which railroad I have frequently written you. The slip is taken from the last report of the company's superintendent, and shows you what a valuable investment it is. The capital is £2,000,000, all, as far as known, held in England, the secretary being in London, where a dividend is bi-annually paid at the rate of 10 per cent. per annum, with always a respectable sum passed over to the credit of the "reserve fund."

The Imperial Government guaranteed and guarantees an interest of 7 per centum per annum upon the capital, all the profit over and above the said 7 per centum to be divided equally between the government and the company, resulting for some years past in a quiet little revenue of £20,000 sterling to £35,000 sterling for the former and 10 per cent. dividend for the latter. The rates of freight and other expenses on this and other independent feeding lines is simply enormous, amounting to about an average, say on coffee, of 25 per centum on Santos sale price for the better qualities and on the lower grades. An attempt has been made to influence the government to authorize and sanction a lower tariff of freights, but I doubt if a favorable result will be arrived at for several years.

* This milk yield was obtained with following daily fodder: 8 to 10 pounds hay; 3 pounds wheat-bran; 2 pounds peas; 2 pounds oats; 1 pound bruised meal; 10 pounds beets, or else 8 to 10 pounds hay; 5 pounds barley; 3 pounds oats; 2 pounds wheat-bran and straw.

In a former dispatch I stated that an apparent reduction of the provincial export duty on coffee had been voted by the provincial legislature, but that as an exporter I paid no attention to it. It now appears that the resolution of the legislature never received the signature of the President of the province; that whilst the legislature might and can lower the provincial taxes, it cannot impose a tax upon such taxes, imposts, or duties. This imposition was paid here by exporters, and by them two months ago reclaimed to the extent of seventy thousand milreis, but not one real has as yet been refunded.

The large receipts of all the railroads of the province will be considerably eaten into this year by expenses incurred in repairing damages caused by the heavy rains of January and February—the fall as taken at the railway station here showing 19.8 inches for January, and 16.9 inches for the shorter month, February, which latter had also more clear, rainless days, so that really the quantity was almost as great in the latter month as in the former, proportionately, whilst the force was much greater, causing land-slides on the Sierra which took three weeks to repair and admit a resumption of suspended traffics. Providential was it that these rains commenced again upon the heels of two or three hot days about the middle of February, otherwise the bilious remittent and intermittent fevers then developed would have generated into fevers of a worse character, such is the broken condition of our streets in many parts of the city for the laying of new water and gas pipes, bad sewerage, &c.

Reverting again to the heavy rains above referred to. They extended all over the province and to a more torrential extent than upon this flat plain, carrying away bridges, roadways, injuring materially villages and towns, and in many cases causing loss of life to man and beast. All this was the result of the previous long drought and the changed seasons which are yearly noticeable here. These rains have been laid hold of as a lever for making our growing coffee crop a small one. The growing crop will not be a small one, but as large as the one we are now shipping, and we will receive more than this year, because railroad facilities for transportation have materially increased. The assertion, as has been published abroad, that the heavy rains had damaged and diminished the coffee yield for the coming year is baseless, and contrary to agricultural common sense, without even the shadow of sophism or theory whatsoever. Drought might have injured the flowers in November and December, but it did not do it. Drought is ever deleterious to coffee, but rain, never.

WM. T. WRIGHT,
Consul.

UNITED STATES CONSULATE,
Santos, March 25, 1882.

SALT INDUSTRY OF CADIZ.

REPORT BY CONSUL OPPENHEIM.

When leaving Cadiz by the railroad running over the narrow neck connecting the city with the mainland, the traveler notices what appears to be a vast net-work of lagoons and marshes, through which the road threads its way around the curve of the bay; closer attention shows that the meandering irregularity of the natural waterways is here and

there broken by ponds or basins, mostly oblong in shape, usually lying in clusters of from ten to twenty ponds each. The outlook is somewhat dreary and suggestive of paludine fevers. There is no vegetation, save here and there a few stunted bushes and some sickly-looking grass, and the first thought of the traveler probably is that this is a most wretched spot, not likely to furnish anything to support a population. The conclusion would, however, be an erroneous one; although the soil is not tilled, yet it is made to bear a crop most indispensable to human existence. In those desolate-looking marshes the ingenuity of man makes the sea yield up treasures, which, if not appealing to the imagination like oriental pearls or the ingots of sunken galleons, are of far greater importance to the welfare of the race. Salt, that most indispensable adjunct to the food of man and beast, is the product of this uninviting region, giving rise to an industry which is no mean factor in the prosperity of the city of Cadiz.

The making of salt has been carried on here on a moderate scale since the beginning of the last century, but its great development does not go back further than about fifty years. The area now covered by the exploitation embraces about from 4 to 5 Spanish square leagues (from 12,000 to 15,000 hectares), being very nearly all the land that, but for the embankments, would be under water at high tide. The process of salt-making is a simple one, consisting mainly in flooding the ponds to a depth of about 12 inches at the opening of summer, and as the evaporation caused by the heat and the dry easterly winds progresses, to let in a fresh supply of salt water; this being repeated until the point of total saturation is reached, when the salt crystals are deposited on the floors of the ponds; these floors, which are made of carefully puddled earth, are kept covered with water during the winter to prevent the formation of cracks or fissures; this is necessary in order to keep the salt as free as possible from earthy admixture; from time to time the ponds are raked and the salt is piled upon the banks, where it undergoes a final drying before being put up in pyramidal mounds.

The work of salt-making begins usually towards the end of May, and ends in September. During this period rains are very scarce in this country. When, however, rain-storms occur, the yield of the salt ponds is liable to be much lessened in quantity, and also injured in quality through the washing of the banks. The worst sort of damage, though, is caused by the absence of the usually prevalent dry easterly winds; winds from any other quarter than east or east-southeast are generally cool or moist, and their evaporating power is consequently insignificant. Very heavy rains during the winter seem also to affect the yield injuriously, probably through the amount of fresh water retained in the ponds and in the porous soil surrounding them.

The mean annual product is reckoned at from 250,000 to 280,000 tons.

In consequence of some of the above mentioned causes, the yields for 1880 and 1881 were respectively only 160,000 and 140,000 tons. Cadiz salt, in ordinary years, contains 94 per cent. of chloride of soda, and is said to be more highly prized for the finer salting operations than any other kind of sea salt. Of the total product, about 20 per cent. is usually retained for home consumption; the remainder is exported to various countries.

In 1881 the total exported was 247,550,000 kilograms, distributed as follows: 23,364,000 kilograms went to the United States; 20,802,000 to the Argentine Republic; 22,292,000 to Brazil; 63,241,000 to Uruguay; 50,211,000 to Great Britain; 33,949,000 to France; 15,256,000 to Norway; 9,130,000 to Russia, and the balance to all other conntries.

The number of laborers employed during the salt-making season is about 1,500. Their wages vary from 12 reals to 26 reals (60 cents to $1.30) per day of from nine to ten hours work. During the winter there is only a small force kept, which is employed in making repairs. The salines belong to a number of individual proprietors, who assemble once, or oftener, each year in order to establish the selling price of the product. Sales are usually made, including delivery, by lighters alongside of vessels; the transfer from the lighter to the ship, however, is at the expense of the purchaser, for which labor (when not done by the crew) the usual charge is from 2 to 3 reals per ton. The unit of measurement of salt is the *last*, which is equal to about 2⅛ avoirdupois tons.

The price is subject to wide fluctuations, depending as it does upon many factors, such as the year's yield, the quantity produced in the competing districts, rates of freight, &c. The highest figure on record is said to have been reached in 1856, when $12 per last was paid; by 1862 it had sunk to from $4 to $5, at which figures it remained until 1868, when it sold as low as $3.50; from 1870 to 1878 the price fluctuated between $4.50 to $5; the deficiency in the yield of the last two years raised the price successively to $6, $8, and $10, the last figure being reached in February, 1882; from that time the price declined, being now $7 per last, and a further reduction to $6 is to take place this coming June.

ERNEST OPPENHEIM,
Consul.

UNITED STATES CONSULATE,
Cadiz, May 3, 1882.

FOREIGN COMMERCE OF AUSTRIA-HUNGARY.

REPORT BY CONSUL-GENERAL WEAVER, OF VIENNA.

A brief abstract of the foreign commerce of Austria-Hungary for 1881 has been recently published, from which I collate the following interesting data. As the customs offices of the empire amount to nearly 500, and the various merchandises are classified into 850 distinct categories, the labor combining the result of the year's traffic into tabular form is immense, and accounts for the delay in publication. It should be understood, however, that the values are as yet estimations, made according to prices established for 1880, and they may be changed by the subsequent official revision of the statistical committee, whose duty it is to fix annually the values of the several categories.

IMPORTS.

The total value of the imports for 1881 is put down at 647,000,000 florins against 613,400,000 in 1880, being an increase of 33,600,000, or 5.5 per cent. When classified into the three general divisions of food, raw material, and manufactures, the following result and comparisons in millions of florins are obtained:

Articles.	1881.	1880.	Difference.	Per cent.
Food	165.2	174.9	— 9.7	— 5.6
Raw material	286.3	262.6	+23.7	+ 9.1
Manufactures	195.5	175.9	+19.6	+11.5
Total	647.0	613.4	+33.0	+ 5.5

The large decrease in the importation of articles of food resulted from the excellent harvest of 1880 compared with that of 1879, on account of which the imports of grain and vegetables fell from 54,000,000 florins in 1880 to 41,000,000 in 1881, while on the contrary coffee, tea, tropical fruits, animals for food, beer, and wine manifest material increase. Likewise certain manufactured articles indicate remarkable increase, viz: agricultural machinery, 3,000,000 florins; metals and their wares, 3,800,000; and textiles for clothing, 4,000,000 florins; but by far the most important increase is seen in the imports of raw materials for manufacture and industrial purposes, as will appear from the following table:

Articles.	Thousands of metrical centner.		Thousands of florins, values.	
	1881.	1880.	1881.	1880.
Hops	15.2	7.7	3,031	1,548
Hides and skins	159.1	149.4	24,489	22,185
Building material	2,506.1	1,371.5	5,349	4,039
Mineral oils	1,414.8	1,154.0	12,888	10,254
Cotton	769.3	696.4	46,413	42,736
Wool	215.2	197.0	40,104	36,572
Flax, hemp, jute	378.0	322.2	14,665	12,522

EXPORTS.

The total value of the exports for 1881 is estimated at 715,800,000 florins against 679,700,000 for 1880, being an increase of 36,100,000 florins, or 5.3 per cent. The value of the exports for 1881 is said to surpass that of any previous year, the increase extending to nearly every class of exports, as may be seen by the following table, giving the value in millions of florins:

Articles.	1881.	1880.	Difference.	Percentage.
Food	278.5	267.6	10.9	4.1
Raw material	201.9	192.9	9.0	4.6
Manufacturers	235.4	219.2	16.2	7.4
Total	715.8	679.7	36.1	5.3

Among the articles for food are included field and garden products, viz: grain, fruits, flour, and vegetables to the value of 138,600,000 florins, being an increase of 5,000,000 florins over 1880; while of sugar alone the value exported amounted to 69,300,000 florins, or a gain of 7,000,000 florins over 1880. The exportation of manufactured articles, however, shows the greatest development, amounting in textiles alone to 64,400,000 florins against an importation of 60,800,000 florins, as may be seen from the following table giving amounts in million of florins:

Textiles.	1880.			1881.		
	Imports.	Exports.	Balance.	Imports.	Exports.	Balance.
Cotton	7.3	8.6	1.3	6.6	7.4	0.8
Linen, jute, &c	5.3	12.2	6.9	4.2	11.1	6.9
Woollen	21.7	30.1	8.4	21.0	24.4	3.4
Silk	17.6	2.7	14.9	16.2	2.6	13.6
Clothing	8.9	10.8	1.9	8.9	10.1	1.2
Total	60.8	64.4	3.6	56.9	55.6	—1.3

Nor is the balance of trade for other manufactures less favorable, the following articles giving the several surpluses of exports over imports, viz: Manufactures of leather, 12,900,000 florins; of wood, 10,000,000; of glass, 15,900,000; of bone, 2,800,000; of iron and steel, 11,300,000, and fancy articles, 24,800,000 florins.

If the imports be compared with the exports it will be seen that the balance of trade is largely in favor of this country for articles of food and manufactures, but against it in respect to raw materials for manufactures and industrial purposes, as appears from the following table, showing the value in millions of florins:

Classification.	Imports.	Exports.	Surplus imports.	Surplus exports.
Articles for food	165.2	278.5	.....	113.3
Raw materials	286.3	201.9	84.4	.....
Manufactures	195.5	235.4	.....	39.9
Total	647.0	715.8	.....	68.8

In 1880 the balance of trade was 92,700,000 florins exports of articles of food and 43,300,000 florins exports of manufactured articles, while the imports of raw materials surpassed the exports of 69,700,000 florins, leaving a total balance of 66,300,000 florins in favor of Austra-Hungary in 1880, against 68,800,000 florins in 1881, while the total commerce of 1881 amounted to 1,362,800,000 florins against 1,293,100,000 florins in 1880, being an increase of 69,700,000 florins, or 5.4 per cent.

It further appears that since 1857—that is, within the last 25 years—the foreign commerce of Austria-Hungary has increased in value 866,600,000 florins, being equal to 174 per cent., or nearly threefold what it was at that period.

Imports and exports compared.

[In millions of florins.]

Classification.	Imports.			Exports.		
	1881.	1880.	Difference.	1881.	1880.	Difference.
Colonial wares and tropical fruits	42.5	38.2	+ 4.3	69.3	62.3	+ 7.0
Tobacco and its manufactures	20.7	27.7	− 7.0	7.6	7.3	+ 0.3
Garden and field products	85.0	98.3	− 13.3	738.6	133.6	+ 5..6
Animals and their products	58.0	49.3	+ 8.7	92.6	82.0	+ 10.6
Fat, lard, and oil	14.5	15.3	− 0.8	12.8	12.9	− 0.1
Beverages and eatables	4.8	4.7	+ 0.1	19.6	26.5	− 7.5
Fuel and timber	28.2	25.8	+ 2.4	70.7	67.5	+ 3.2
Drugs, chemicals, and gum	33.2	26.7	+ 6.5	5.2	4.5	+ 0.7
Weaving material and yarns	153.9	142.1	+ 11.8	49.7	51.3	− 1.6
Textiles, clothing, and millinery	60.9	56.9	+ 4.0	64.4	55.5	+ 8.9
Bristles, bark, fiber, and paper goods	6.1	6.1	.....	10.0	8.8	+ 1.2
Gutta-percha, leather, and fur goods	30.2	26.9	+ 3.3	20.6	18.6	+ 2.0
Wood, bone, glass, and clay goods	17.3	17.1	+ 0.2	43.5	42.3	+ 1.2
Metals and hardware	24.3	20.5	+ 3.8	27.5	29.4	− 1.9
Vehicles for transportation	0.5	0.2	+ 0.3	6.1	6.0	+ 0.1
Instruments, machinery, and fancy goods	23.8	24.3	+ 4.5	45.6	41.8	+ 3.8
Medicines, colors, salt, and explosives	16.0	14.0	+ 2.0	16.1	14.9	+ 1.2
Objects of art and literature	18.7	16.2	+ 2.5	9.9	9.4	+ 0.5
Refuse	3.4	3.1	− 0.3	6.6	5.1	+ 1.5
Total	647.0	613.4	+ 33.6	715.8	679.7	+ 36.1

TRAFFIC IN PRECIOUS METALS.

The total value of the importation of precious metals and coins in 1881 was 32,860,148 florins against an export of 2,528,882 florins, leaving a balance in favor of this country of 30,331,266 florins against 10,676,219 florins in 1880, which last amount resulted from an import of 29,350,735 florins and export of 18,674,516, so that while the imports in 1881 were 3,509,413 florins greater, the exports were 16,145,634 florins less than in 1880. The relative proportion of gold and silver may be seen from the following table, giving the values of each in millions of florins:

	Imports.		Exports.		Remaining.	
	1881.	1880.	1881.	1880.	1881.	1880.
Gold	19.8	22.2	2.2	3.2	17.6	19.0
Silver	13.1	7.1	0.3	15.4	12.8	—8.3
Total	32.9	29.3	2.5	18.6	30.4	10.7

In 1881, of the gold surplus, 52.8 per cent. was employed for the payment of duties against 41 per cent. in 1880.

ENTRY DUTIES.

The total amount of duties collected in 1881 was 33,585,848 florins, against 30,211,822 florins in 1880, being an increase of 3,374,027 florins, or 11.2 per cent. The monthly receipts in 1881 surpassed in every instance those of 1880. Of the increase, 29 per cent. was collected on raw coffee and 22 per cent. on refined petroleum. The currency in which the duties were paid will be seen from the following table, compared with 1880.

Currency.	1881.	1880.	Difference.	Per cent.
	Florins.	*Florins.*	*Florins.*	
Gold	9,294,424	7,767,175	1,527,249	19.7
Silver	24,126,035	22,263,336	1,862,699	8.3
Paper	165,389	181,310	—15,021	—8.8
Total	33,585,848	30,211,821	3,374,027	11.2

REFUND OF EXCISE DUTIES ON EXPORTS.

The amount of export premiums excise duties refunded on the exportation of sugar, brandy, and beer in 1881 was 30,179,665 florins, against 25,250,949 florins in 1880, being an increase of 4,928,716 florins, or 19.5 per cent., being 1,554,689 florins more than the increase on entry duties. The restitutions in 1881 amounted to 89.96 per cent. of gross amount of entry duties. The following table exhibits the amounts refunded on the several articles in 1881 and 1880:

Articles.	1881.	1880.	Increase.
	Florins.	*Florins.*	*Florins.*
Sugar	27,593,267	22,688,590	4,904,677
Brandy	2,199,232	2,188,514	10,718
Beer	387,166	373,845	13,321
Total	30,179,665	25,250,949	4,928,716

GENERAL OBSERVATIONS.

It would appear from the foregoing that the commercial and industrial condition of the Austro-Hungarian Empire during 1881 was highly satisfactory, in that the amount of manufactured goods exported manifest considerable development. Yet it must not be forgotten that for the present the profit of a transaction is not at all commensurate with its magnitude, since manufacturers and middlemen are forced, by close and active competition, to accept exceedingly small margins. One must expect, therefore, to hear of general complaint and dissatisfaction, and efforts made to lop off every possible unnecessary expense; for in order to succeed larger quantities and cheaper prices are absolute necessities.

Again, the financial condition of the empire is so deplorable, the public debt of both Austria and Hungary accumulating so rapidly, that the burden of taxation is felt in every ramification of trade, so that one would not expect that banking, transportation, and industrial corporations and firms would be able to declare fair dividends; yet those who have followed the publication of the accounts-current of such institutions during the last three months must have been surprised at the exceedingly favorable results, indicating generally dividends of 8, 10, and 15 per cent. after deposit of the usual reserve funds.

Into the whole problem of production and sale of goods at low prices enters largely the factor of labor. The question of transportation is important, but only secondary, for where the laboring classes, as in this country, from time to time immemorial, have been accustomed to the plainest food and clothing, they can and will work contentedly at wages surprisingly small, when compared with those received in the United States; and although the rate of production is somewhat correspondingly small, yet there is certainly a large margin left accruing to the advantage of the European manufacturer, so that in various lines of production he is enabled to undersell American manufacturers. Moreover, the character of the labor precludes the employment of machinery, consisting of artistic or skilled hand labor, which acquires a long apprenticeship, discipline, and contentment of mind, not compatible with the temperament of the American laboring classes. Hence, for many years yet to come, Austria can hope to export thousands of fancy articles when her agricultural products have been pushed into the background.

JAMES RILEY WEAVER,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
Vienna, April 11, 1882.

THE MERCHANT MARINE OF AUSTRIA.

REPORT BY CONSUL-GENERAL WEAVER, OF VIENNA.

In view of the general discussion carried on in the United States at the present time over the condition of our merchant marine, I beg to transmit the following statistical data, which have recently been made public in this country, in regard to the condition of the merchant marine of the Empire of Austria-Hungary, at the close of the year 1881.

I.—ITS CONDITION IN 1881.

The Austro-Hungarian merchant marine is composed of five categories of vessels, viz: Sea-going vessels, long-coasting vessels, short-coasting

vessels, fishing boats, and finally lighters and small boats. The number, tonnage, and equipage of each of these classes for the years 1881, 1876, and 1871, for Austria and Hungary will be seen from the following table:*

Class of vessel.	Year.	Austria.			Hungary.			Total.		
		Vessels.	Tonnage.	Crews.	Vessels.	Tonnage.	Crews.	Vessels.	Tonnage.	Crews.
Sea-going vessels	1881	369	212,616	5,165	139	63,898	1,406	508	276,514	6,571
	1876	427	218,295	5,742	146	63,891	1,510	573	282,096	7,252
	1871	488	248,737	6,542	165	78,848	1,711	653	327,585	8,253
Long-coasting vessels	1881	70	9,430	462	3	612	21	73	10,042	483
	1876	66	5,768	343	7	927	44	73	6,695	387
	1871	104	10,516	553	16	1,680	92	120	12,196	645
Short-coasting vessels	1881	1,502	23,120	4,310	184	2,380	520	1,786	25,500	4,830
	1876	1,667	24,884	5,114	219	3,023	612	1,886	27,857	5,726
	1871	2,091	35,960	6,516	266	3,040	604	2,297	38,990	7,120
Fishing boats	1881	2,047	5,719	7,433	64	136	142	2,111	5,855	7,575
	1876	1,925	5,708	7,258	64	136	142	1,989	5,839	7,400
	1871	1,296	3,715	4,155	53	87	148	1,349	3,802	4,303
Lighters and small boats	1881	3,847	8,756	7,552	81	162	176	3,928	8,918	7,728
	1876	2,943	7,493	6,731	74	140	158	3,017	7,633	6,760
	1871	3,344	8,461	7,299	126	117	253	3,470	8,578	7,552
Total	1881	7,935	259,641	24,922	471	67,188	2,265	8,406	326,829	27,187
	1876	7,028	262,093	25,188	510	68,027	2,466	7,538	330,120	27,654
	1871	7,323	307,289	25,065	566	83,772	2,808	7,889	391,061	27,873

If, however, the fishing boats, lighters, and other harbor boats be omitted, the merchant marine of Austria-Hungary, was as follows: In 1881, 2,367 vessels, 312,056 tons, 11,884 crew; in 1876, 2,532 vessels, 316,648 tons, 13,365 crew; in 1871, 3,070 vessels, 378,681 tons, 16,018 crew, which manifest during the last decade a decrease of 22.9 per cent. in the number of vessels, and 17.6 per cent. in the tonnage, which is explained by the fact that from year to year the tendency is to construct larger sailing vessels and steamers with greater tonnage, since from the foregoing figures it appears that the average tonnage in 1871 was 123, in 1886, 125, and in 1881, 131 tons.

Of the foregoing vessels the following were steamers:

Classifications.	Steamers.	Tonnage.	Crew.	Horse-power.
Sea-going vessels	70	62,387	2,203	16,145
Large coasting vessels	11	3,368	187	1,440
Small coasting vessels	31	1,104	168	739
Total in 1881	112	66,859	2,558	18,324
Total in 1876	98	56,959	2,353	16,392
Total in 1871	92	48,562	2,330	16,907

It should be observed that the above table does not include the river traffic, of which the Danube Steamship Company absorbs nearly the whole, having in 1880 185 steamers of 16,679 horse-power, also that the Austro-Hungarian Lloyds possess nearly, if not altogether, all the sea-going steamers, having in 1880 72 steamers of 17,100 horse-power, and 4 others in process of construction.

Of the total number of steamers the following belonged to Transleithania, or the kingdom of Hungary: In 1881, 6 steamers, 181 tons, 31 men, 105 horse-power; 1876, 5 steamers, 180 tons, 27 men, 94 horse-power; 1871, 1 steamer, 9 tons, 2 men, 8 horse-power.

*The above table and much of the statistical data contained in this dispatch have been taken from the "Statische Monatsschrift" for March, 1882, published by the imperial royal direction of administrative statistics of Vienna.

The average tonnage of the Austro-Hungarian steamers in 1881 was 891 for sea-going vessels, 306 for large coasters, and 39 tons for small coasting vessels, and 109 for the sailing vessels.

For the sake of comparing the merchant marine of this empire with that of other European countries, the following table is inserted, taken from Kiaer's "statistique international navigation maritime," published by the statistical bureau of the Kingdom of Norway for 1879 and 1870, arranged in the order of size:

Countries.	1879.		1870.	
	Vessels.	Tonnage.	Vessels.	Tonnage.
Great Britain and Ireland	25, 565	6, 881, 323	26, 367	5, 324, 341
Sweden and Norway	12, 449	2, 051, 511	10, 369	1, 358, 885
Germany	4, 771	1, 171, 286	4, 519	962, 355
Italy	8, 061	1, 005, 972	11, 857	928, 967
France	15, 023	963, 568	15, 386	1, 085, 375
Holland	1, 120	351, 810	1, 985	449, 556
Austria-Hungary	8, 226	330, 672	7, 961	379, 165
Finland	1, 811	292, 520	1, 829	272, 250
Denmark	3, 243	261, 000	2, 791	184, 724
Total	80, 279	13, 309, 662	83, 064	11, 455, 608

It will be seen from the foregoing table that for the period 1870–'79 Denmark shows an increase in her tonnage of 41.3 per cent., Sweden and Norway 40.6 per cent., Germany 19.2 per cent., Great Britain and Ireland 18.1 per cent., Italy 8.9 per cent., and Finland 7.4 per cent., while, on the contrary, the following countries show material diminution, as follows: Holland 22.2 per cent., Austria-Hungary 12.8 per cent., and France 11.2 per cent.

INCREASE.

Changes in 1881.	Sea-going.		Long coasters.		Short coasters.		Fishing.		Total.	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
Constructed	10	8, 454	6	748	44	570	64	132	124	9, 904
Reoutfitted	....	....	....	....	2	29	18	24	20	53
Purchased	9	4, 930	....	....	3	66	4	33	16	5, 029
Changed in tonnage or category	12	5, 895	12	2, 957	107	1, 336	36	87	167	10, 275
Total increase	31	19, 279	18	3, 705	156	2, 001	122	276	327	25, 261

DECREASE.

Shipwreck	35	15, 215	3	381	7	159	....	....	45	15, 755
Broken up	1	412	....	....	43	331	35	91	79	834
Dismasted	....	....	1	66	2	34	....	....	3	100
Sold	7	1, 885	2	118	13	348	1	2	23	2, 353
Changed in tonnage or category	16	8, 717	9	605	97	1, 515	27	83	149	10, 920
Total decrease	59	26, 229	15	1, 170	162	2, 387	63	176	299	29, 962
Increase	....	....	3	2, 535	....	....	59	100	28	....
Decrease	28	6, 950	....	....	6	386	....	....	....	4, 701

Compared with previous year, the changes in 1881 manifest an increase of 33.8 per cent. of the tonnage of the long coasters, and 1.7 per cent. of the tonnage of the fishing vessels, but a decrease of 2.4 per cent. of the tonnage of the small coasters. In the fifth category, not included in the foregoing table, there was, during 1881, an increase of 186 vessels and

92 tons, or 4.98 and 1.04 per cent. respectively. If, however, in the sea-going vessels we omit the modifications on account of change of tonnage and classification, the totals for 1881 show a decrease of 24 vessels, and 4,128 tons, being a loss of tonnage during the year equal to 1.5 per cent. of the total sea-going tonnage.

During the last decade, 1872–81, the number of vessels built in the country and purchased from foreigners, omitting as usual the fifth class, was as follows: Vessels built, 1,605 vessels, 129,198 tons; vessels purchased, 120 vessels, 36,554 tons; totals, 1,725 vessels, 165,725 tons, against a loss occasioned by shipwreck and sale to foreigners as follows:

Vessels shipwrecked, 405 vessels, 108,864 tons; vessels sold, 271 vessels, 51,155 tons; total, 676 vessels, 160,019 tons; showing an increase of 1,055 vessels, 5,733 tons; averaging an annual increase of 105 vessels and 573 tons.

The largest tonnage of vessels built in any one year of the decade was 20,859 tons in 1875, while the smallest was 7,864 tons in 1880, the general tendency being diminished ship-building, but increased purchase from foreigners. In 1873–'74 the number of vessels sold to foreigners was 117, with a total of 27,507 tons burden, while for the seven subsequent years the average is only 19 vessels with a total tonnage of 2,632 tons, being about fifty per cent. of the tonnage annually purchased from foreigners. Taking the tonnage of 1871 (omitting that of the fifth category, as usual) as a basis of calculation, viz, 382,483 tons, it furthermore appears that during the decade of 1872–'81 the increase by construction of new vessels was 33.8 per cent., and by purchase from foreigners 9.8 per cent., while the decreases were the following: by shipwreck, 28.4 per cent., and through sale to foreigners, 13.4 per cent.

III.—Ship-building in Austria-Hungary.

The number and tonnage of vessels of all classes built and reconstructed and repaired in Austria-Hungary during the quinquennium 1877–'81, compared with the like former period of 1872–'76, will be seen from the following table:

Years.	Countries.	Number of ship-yards.	New built.			Rebuilt and repaired.		
			Ships.	Tonnage.	Approximative value of the hull and masts in florins.	Ships.	Tonnage.	Cost of reconstruction and repair in florins.
1881	Austria	43	239	8,070	2,173,077	362	131,785	1,163,416
	Hungary	4	3	1,684	254,585	7	188	1,600
1880	Austria	46	203	10,223	2,774,084	503	126,220	1,194,772
	Hungary	2	2	72	9,300	6	848	26,200
1879	Austria	41	235	16,724	2,826,175	486	133,911	1,321,981
	Hungary	5	7	2,586	398,035	4	438	13,400
1878	Austria	47	212	7,719	1,496,535	390	110,738	1,316,743
	Hungary	6	10	4,006	619,860	1	79	3,000
1877	Austria	45	186	12,239	2,112,750	405	123,103	1,370,418
	Hungary	5	10	3,996	595,605	.....	.....	.....
1877–1881	Austria	.....	1,075	54,975	11,382,621	2,146	625,757	6,367,330
	Hungary	.....	32	12,344	1,877,385	18	1,553	44,200
	Total	.....	1,107	67,319	13,260,006	2,164	627,310	6,411,530
1872–1876	Austria	.....	1,367	58,613	11,205,811	2,790	436,810	3,838,266
	Hungary	.....	70	24,688	3,546,415	35	849	12,266
	Total	.....	1,437	83,301	14,752,226	2,825	437,659	3,850,532

It will be seen from the foregoing table that during the decade there were built in the empire 2,544 new vessels, having a total tonnage of 150,620 tons, valued at 28,012,232 florins, while the reconstructions and repairs on 4,989 vessels amounted to 10,262,062 florins additional. Of the 1,107 vessels constructed in 1877–'81, 210 were sailing vessels, 26 steamers and 871 small boats under 10 tons burden, while of the 2,164 vessels reconstructed and repaired, 763 were sailing vessels, 476 were steamers, and 925 were small crafts as before described. The value of the new vessels constructed in 1877–'81 was 10 per cent. less than the value of those constructed in 1872–'76, while the value of the repairs in 1877–'81 exceeded the value of the same for 1871–'76 by 66.5 per cent.

The material employed in the construction of these vessels in 1881, 1877–'81, and 1872–'76 is given as follows:

Material.	1881.	1877–'81.	1872–'76.
Oak timber:			
Domestic....cubic meters..	6,292	51,367	49,713
Foreign....do....	714	13,707	9,453
Spruce pine:			
Domestic....do...	2,835	14,336	10,995
Foreign....do....	768	1,855	245
Larch wood, domestic....do....	1,080	11,068	12,682
Do....do....	1	43	1
White pine:			
Domestic....do....	2,980	18,780	17,233
Foreign....do....	10	43	75
Beech wood:			
Domestic....do....	586	159,952	7,163
Foreign....do....			
Iron:			
Domestic....tons..	4,088	9,518	5,591
Foreign....do....	3,855	9,879	12,306
Copper:			
Domestic....do....	47	127	85
Foreign....do....	27	87	484
Zinc:			
Domestic....do....	13	35	115
Foreign....do....	1	3	49
Brass:			
Domestic....do....	66	226	2,475
Foreign....do....	76	362	710
Lead:			
Domestic....do....	53	144	136
Foreign....do....	2	14	233

It will be seen from the foregoing table that domestic woods are principally employed for ship-building in Austria-Hungary, the only principal exception being Italian oak, which was employed as follows: 16 per cent. in 1872–'76, and 21 per cent. in 1877–'81. Of the metal material, however, a smaller per cent. was domestic, viz:

Metals.	1877–'81.	1872–'76.
	Per cent.	*Per cent.*
Iron	51	69
Copper	41	85
Zinc	9	30
Brass	62	22
Lead	8	63

From England were imported during the year 1881 3,817,843 kilograms iron, 5,023 kilograms copper, 75,992 kilograms brass; from Germany came 37,387 kilograms iron, 115 kilograms brass; from Belgium 1,200

kilograms copper and 500 kilograms zinc; from Spain 1,615 kilograms lead, and from Australia 20,700 kilograms copper.

IV.—COMMERCIAL TRAFFIC.

The tonnage of the arrivals and departures of vessels of all nationalities in the 105 ports of Austria, not including Fiume, in Hungary, manifests considerable development, increasing from 4,658,038 tons in 1876 to 5,911,885 in 1880, being an increase of 27 per cent., while the number of vessels fell off from 49,536 in 1876 to 47,045 in 1880, or a decrease of 5 per cent., as may be seen from the following table:

Character of vessels.	Arrivals.		Departures.	
	Vessels.	Tonnage.	Vessels.	Tonnage.
Sailing vessels:				
Laden	15,052	486,020	15,000	565,027
In ballast	6,944	251,640	6,934	179,647
Unemployed	5,634	226,826	5,581	226,968
Totals	27,630	964,486	27,515	971,642
Steamers:				
Laden	12,857	3,564,188	11,037	3,149,788
In ballast	2,217	519,027	4,006	918,518
Unemployed	4,341	864,234	4,349	873,832
Totals	19,415	4,947,399	19,392	4,942,078
Total vessels:				
Laden	27,909	4,050,158	26,037	3,714,769
In ballast	9,161	770,667	10,940	1,098,160
Unemployed	9,975	1,091,060	9,930	1,100,909
Totals in 1880	47,045	5,911,865	46,907	5,913,720
Totals in 1879	48,704	5,493,282	48,534	5,490,417
Totals in 1878	50,032	4,991,822	50,134	4,998,019
Totals in 1877	52,766	5,003,195	52,954	4,989,961
Totals in 1876	49,536	4,658,038	49,801	4,662,366

The diminished number of vessels, but increased tonnage of arrivals is explained by the fact that the tonnage of steamers, which in 1876 amounted to 76.2 per cent. of the whole, increased in 1880 to 83.6 per cent. of the whole. Of the whole traffic, after omitting the unemployed tonnage, the Austro-Hungarian vessels absorbed 86.89 per cent. in 1880, against 85.83 per cent. in 1879, while of the small balance left in 1880, Italy had 7.15 per cent. and English steamers 4.11 per cent. If, however, the countries to and from which the commercial movement took place be regarded, it appears that of the whole traffic Austria possessed 73.24 per cent., Turkey, 7.27; Italy, 6.25; Greece, 3.20; Great Britain, 3.10, and the United States 1.10 per cent. This last item was composed of 56,819 tons arrivals from, and 49,073 departures to the United States. The principal article of the entry cargoes from the United States was 384,216 metrical centners of refined petroleum.

The leading eleven ports of Austria, with which the foregoing traffic was carried on, will be seen from the following table, giving the number

of arrivals and departures with their tonnage for 1880, omitting, as before, those vessels denominated unemployed:

Ports.	Arrivals.		Departures.		Percentage of total traffic.	
	Vessels.	Tonnage.	Vessels.	Tonnage.	Vessels.	Tonnage.
Trieste	7,208	1,111,931	7,200	1,121,642	19.46	23.18
Zara	1,100	265,384	1,109	264,793	2.98	5.50
Spalato	1,624	246,931	1,624	245,572	4.39	5.11
Pola	1,687	236,078	1,682	234,936	4.55	4.88
Gravosa	911	226,961	921	227,393	2.47	4.72
Lussin-Piccolo	639	197,025	636	196,977	1.72	4.10
Curzola	676	186,556	669	185,892	1.82	3.86
Sebenico	1,028	165,161	1,025	163,413	2.77	3.41
Cattaro	488	132,182	498	132,659	1.33	2.75
Rovigno	1,330	130,189	1,328	130,135	3.60	2.70
Pirano	1,504	81,529	1,492	81,340	4.04	1.69
All others	18,875	1,840,898	18,793	1,828,168	50.87	38.10
Total	37,070	4,820,825	36,977	4,812,920	100.00	100.00

During 1881, the Austro-Hungarian Lloyd Steamship Company received from the general government subventions and compensations to the amount of 1,737,022 florins for 1,441 voyages, aggregating 1,516,201 sea miles, while for 1881 Hungary granted a subsidy of 150,000 florins to the Adria Steamship Company, plying between Fiume and England.

Under special further privileges accorded by Hungary, Fiume is rapidly developing into a first-class port, and becoming a strong rival to Trieste, the Austrian commercial metropolis.

JAMES RILEY WEAVER,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
Vienna, March 22, 1882.

FOREIGN COMMERCE OF BELGIUM.

REPORT BY CONSUL STEUART, OF ANTWERP.

A statement of the movement of the commerce of Belgium with foreign countries for the month of March, 1882, and also for the first quarter, 1882, as compared with the same quarter in 1881, has just been issued by the minister of finance, and from it we glean the following statistics:

The increase for the month of March, 1882, was 15 per cent. in importations, and 18 per cent. in exportations over the same month in 1881, and during the first quarter of 1882 there was an increase of 23 per cent. in the amount of importations into Belgium, and an increase of 24 per cent. in the amount of exportations from Belgium, above the same period of time in 1881.

The increase and decrease of the different articles of imports and exports are shown in the following tables:

INCREASE.

	Francs.
Wheat	24,793,000
Flax and hemp	5,390,000
Corn and oats	4,952,000
Barley	4,919,000
Textile fabrics	2,766,000

	Francs.
Guano	2,755,000
Hides and skins	2,186,000
Oil seeds	2,047,000
Rye	1,821,000
Wood, oak and walnut	1,360,000
Wood, other kinds	375,000
Coffee	1,325,000
Sheep	1,240,000
Linen thread	1,185,000
Copper and nickel	817,000
Machinery	740,000
Rags	714,000
Wine	671,000
Brandy	650,000
Iron ore and filings	583,000
Clothing	521,000
Chemicals	513,000
Potatoes	467,000
Fancy goods and hardware	432,000
Resin	383,000
Butter	329,000
Petroleum	2,593,000

DECREASE.

Meat	8,175,000
Silk	1,508,000
Flour	1,505,000
Hogs	946,000
Sugar	882,000
Rice	761,000
Oxen	666,000
Iron, manufactured	461,000
Tobacco	401,000
Barley	352,000

Values of the exportations from Belgium for the first quarter of 1882 *as compared with* 1881.

INCREASE.

	Francs.
Wheat	14,916,000
Machinery	6,955,000
Stones	6,696,000
Linen thread	6,233,000
Textile fabrics	5,440,000
Woolen thread	4,210,000
Flax and hemp	3,928,000
Hides and skins	3,054,000
Steel, bar	2,564,000
Steel, wrought	1,410,000
Sugar, coarse	2,431,000
Sugar, refined	392,000
Wool	2,127,000
Corn and oats	1,961,000
Barley	1,174,000
Iron, manufactured	1,812,000
Iron, wrought	855,000
Iron, cast	445,000
Oil seeds	980,000
Oils	702,000
Coke	660,000
Clothing	643,000
Sheep	619,000
Guano	598,000
Rags	510,000
Horses	470,000
Petroleum	415,000
Cotton thread	410,000
Copper and nickel	322,000

DECREASE.

	Francs.
Rye	2,560,000
Hides and skins, rough	2,269,000
Meat	3,542,000
Zinc	1,485,000
Silks	1,032,000
Candles	815,000
Lead	772,000
Rice	488,000
Arms	486,000
Paper	849,000
Butter	451,000
Glass	326,000

The above statements show the differences in value in francs, but as weights and measures give a more correct idea than valuation, I will give the quantities of some of the articles mentioned above, viz:

The total amount of wheat imported into Belgium from all countries during the first quarter of 1882 was 193,586 tons, being an increase over the corresponding time of the previous year of 85,491 tons. The quantity coming from India was 66,500 tons, being an increase of 60,000 tons; Russia sent 45,000 tons, being an increase of 6,000 tons. From Egypt, that sent 8,000 tons in 1881, nothing was received in 1882.

The increased quantity of corn and oats for the quarter was 25,000 tons, of which increase 18,000 tons came from Russia, 4,000 from Sweden and Norway, 6,000 from Prussia, and 1,000 from the United States. The falling off was 4,000 tons from Turkey and Roumania.

In barley, the increase for the quarter was 22,000 tons, as follows: increase from Russia, 20,000 tons; Prussia, 3,000 tons; Roumania, 3,100 tons. Decrease, from France, 2,000 tons; Turkey, 1,650 tons; Algeria, 600 tons.

The importation of flax and hemp was 3,200 tons in excess for the quarter, 1,500 tons of the increase coming from Russia, and 16 tons from Prussia.

It will be seen from the above figures that Russia and the East are rapidly regaining their former importance in the grain trade of this port, which for several years past they had lost by reason of bad crops and the heavy importations from the United States.

The increase in refined petroleum came from the United States, and we also sent 4,123 tons of rosin and other bitumen during the quarter, against 2,470 tons for the same time in 1881.

The quantity of rye received from the United States during the quarter was 25,000 tons less than for the same time in 1881; whilst there was an increase from Russia of over 6,000 tons, and 4,200 tons from France. The total increase of importations for Belgium from all countries for the quarter was 8,000 tons, whilst the total decrease in exportations was 11,000 tons.

In glass, the total amount of exportation was: mirrors, 1,015 tons; window glass, 18,782 tons; bottles and glasses, 610 tons. Fine cut and gilded glass: 662 tons common glassware, 21 tons, in fine cut-glass, and an increase of 108 tons in bottles, &c.

The direct trade between the United States and Belgium for the first quarters of 1881 and 1882, is shown in the following table of imports and exports:

Table showing the imports from the United States into Belgium for the first three months of the years 1882 *and* 1881.

Articles.		1882. Three months.	1881. Three months.
Arms	frs.	138,556	10,960
Grain:			
Wheat	tons.	62,529	56,108
Corn and oats	do.	11,631	10,991
Rye	do.	2,166	4,611
Petroleum	do.	26,632	14,256
Meat	do.	4,760	2,580
Lard and tallow	do.	4,581	4,016
Resin and bitumes	do.	4,123	2,469
Flour and meal	do.	788	5,976
Coffee	do.	643	379
Oils	do.	469	60
Tobacco:			
Unmanufactured	do.	307	776
Manufactured	do.	4	1
Iron	do.	.....	1,261
Horses	head.	22	.....

Table showing the exports from Belgium to the United States for the first three months of the years 1882 *and* 1881.

Articles.		1882. Three months.	1881. Three months.
Arms	frs.	185,133	152,750
Iron:			
Old	tons.	4,280	6,715
Rails	do.	1,000	3,000
Wrought	do.	268	279
Manufactured	do.	323	5
Nails	do.	8½	.....
Other kinds	do.	569	57
Glass:			
Window	do.	3,555	4,379
Mirrors	do.	228	146
Bottles	do.	.....	84
Other, common	do.	47	54
Fine cut, and gilded	do.	47	24
Steel:			
Bar	do.	2,193	376
Cast	do.	300	.....
Rags	do.	1,282	25
Zinc	do.	484	207
Potatoes	do.	461	.....
Hides and skins	do.	194	443
Cotton goods	do.	79	18
Woolen goods	do.	22	19
Paper	do.	14½	20½

Among the imports *petroleum* shows a very large increase, nearly 50 per cent. There is also an increase in the quantity of wheat, but it is comparatively trifling, and is nearly all California white wheat, coming from San Francisco. There is but little American red winter wheat arriving, and there is none on the market. This is the favorite wheat, and always leads the market; the price for it at present is quoted, per 100 kilograms, 30 to 30½ francs; California, 28½; Bombay, 26½ to 27½; and Odessa, 26 to 27 francs.

Rosin shows a considerable increase, and the demand is quoted as being good, at about 3¼ florins (Holland) per 50 kilograms.

The decrease in the quantity of meat received outrivals the increase in *petroleum*, being over 50 per cent. as compared with the corresponding quarter in 1881. This great falling off is in a measure owing to the many well-known disturbing causes that have affected this article all over Europe, but more particularly on account of the control of the markets in America by speculators who force the prices higher in the markets of the United States than the article will command on this side of the water, so much higher that orders from America have been filled upon this market. Under such a state of affairs it is not surprising that, although freights are merely nominal from New York this way, no goods are being shipped, and I am under the impression that when the returns for the present quarter are obtainable, they will show a still greater decline in the receipts of this and other American products. The prices at present are 126 francs for long middles and 136 francs for short middles, per 100 kilograms.

Among the exports from Belgium there is a noticeable item of 461 tons of potatoes.

JOHN H. STEUART,
Consul.

UNITED STATES CONSULATE,
Antwerp, May 17, 1882.

TRADE AND COMMERCE OF MADEIRA.

REPORT BY CONSUL HUTCHISON, OF FUNCHAL.

According to the census of 1877, the population of the Island of Madeira was 120,000 and that of the town of Funchal 20,000. Emigration is not encouraged, but rather the contrary. The military law prevents youths between 14 and 22 from leaving the island, which bears very hard on the people.

GENERAL CONDITION.

There is no prospect of an improved condition of the island. Trade is paralyzed, the chief article of export, wine, being in little demand. Hence, the price ought to fall, but on the other hand, the ravages of the *phylloxera* and the prospect of the destruction of the vines, operate in sustaining the prices. These, however, are much lower than formerly, and there is abundance of good wine on the island. Embroidery used to come next to wine among the exports, but this article has all but ceased to be in demand. England was the chief purchaser. Green fruit and onions have latterly been exported to a larger extent.

Notwithstanding the unfortunate state of the island the Portuguese government, being in great financial difficulties, is constantly adding to the burdens of the people.

PRICES.

The following are the prices of a few leading articles:

Bread	per pound..	$0 05
Flour (duty ½ cent)	do....	06
Corn (duty ¼ cent)	do....	02½
Wheat (duty ¼ cent)	do....	03½
Potatoes	do....	02½
Sweet potatoes	do....	01½
Beef	do....	11

Pork	per pound..	$0 15
Mutton	do....	14
Veal	do....	14
Poultry	each..	38
Codfish dried	per pound..	0⅝
Rice (duty 1 cent)	do....	05
Sugar, native	do....	12
Butter	do....	26
Petroleum (duty 2½ cents)	do....	

Laborers earn 38 cents a day, and skilled artificers 75 cents.

PRODUCTION.

The chief products are wine and sugar. As already stated, the former has fallen off greatly, and the yield in 1881 was only about 4,000 pipes.

The sugar-cane crop yielded 3,118,585 gallons of juice, of which 2,019,845 gallons were manufactured into 1,040,478 kilograms sugar, value 2,800 reis* per 15 kilograms, making the value 194,222,560 reis. Molasses from the above, 90,130 gallons, produced 45,060 gallons spirits, at 800 reis per gallon, 36,048,006 reis. The remaining juice, 1,098,740 gallons, produced 121,310 gallons (of 23° cent.), valued at 630 reis per gallon, 76,425,300 reis, making a total product of 306,695,860 reis.

There are five sugar works on the island, and the present price of the cane is 400 reis for 64 pounds. The exportation of the sugar is confined to Portugal, as it cannot compete with the article in other countries.

Recently two small tobacco factories have been started, the leaf being imported from the Azores. The cultivation of the plant in the island has also lately commenced.

IMPORT AND EXPORT DUTIES.

The existing import duties have recently been somewhat increased by an addition being made to them, in supplement of the municipal revenue. On articles usually imported from the United States, no additions have been made worthy of notice.

Ham and bacon from the States were beginning to find a market here, when the import was arrested by the prohibitory decree.

There are no differential duties on merchandise imported in Portuguese and foreign vessels; the export duties trifling, except on wine, which is $5 a pipe.

PORT CHARGES.

On vessels with cargo for the port:

Tonnage dues	per ton..	$0 12½
Emoluments	100 tons and under..	4 00
Emoluments	above 100 and under 200..	5 00
Emoluments	200 and upwards..	6 00
Visit boat		60

Two officers on board at 40 cents a day and food.

A copy of instructions to masters of vessels entering the port is sent herewith.

On vessels without cargo, no items or emoluments; visit bout and officers, as above.

Lighterage may be estimated at about 40 cents per ton. Commissions for buying or selling, 3 per cent.

* 1,000 reis = 1 milreis, and 1 milreis = $1.08.

EDUCATION.

The existing laws relative to education are better than formerly, but unfortunately they are not put in execution. The burden of providing the funds is thrown by the government upon the municipalities, who have not sufficient for the purpose and are not disposed to add to the heavy burdens of the people by levying a rate specially. The result is that the teachers are wretchedly remunerated, often receiving in rural districts not more than $100 a year, and, as may be supposed, they are often very incapable. Parents are in many cases indifferent about the education of their children, and although they are liable to a fine for not sending them to school, the penalty is never enforced.

CLIMATE.

As letters are often received at the consulate asking for information about the climate, a few remarks may not be out of place. The value of the climate as a winter resort for those suffering from lung disease has long been recognized. The equability of the climate is remarkable, and invalids are never confined to the house by rain for more than a day or two together, and that seldom.

The mean temperature for each month is as follows:

January	63.50
February	63.14
March	64.22
April	64.40
May	64.76
June	68.72
July	72.50
August	73.58
September	73.94
October	71.06
November	67.64
December	63.86

The result of various combined observations gives the mean temperature of the seasons as follows: Winter, 61.34; spring, 64.23; summer, 69.77; autumn, 67.36.

Average days of rain, 88; inches of rain, 30; mean humidity (saturation 100), 76.

The hotels are under English management and afford every comfort, charges varying from $45 to $75 a month. There are also furnished houses to be had, from $300 to $700 for the season. Many of the servants can speak English. Cooks' wages $8 to $10 a month; housemaids, $5 to $7, with food. The only *foreign* coins in circulation are the English sovereigns and half sovereigns.

As Portuguese consuls in the United States sometimes inform intending visitors to the island that a passport from them is absolutely necessary, it may be well to state that that is a mistake. No passport is ever asked for on arrival, but no one can *leave* the island without a passport from the governor.

J. HUTCHINSON,
Vice-Consul.

UNITED STATES CONSULATE,
Funchal, April 1, 1882.

PRODUCTS OF THE STRAITS SETTLEMENTS.

REPORT BY CONSUL STUDER, OF SINGAPORE.

The products that belong to this part of the world exclusively are the following: Rattans, nutmegs, cloves, cardamums, cinnamon, and cassia; areca nuts, gum-dammar, gum-Benjamin, sticklac, dragon's-blood, gamboge, sapan, and lacca wood (dye-stuff), sandal-wood, teak, &c., woods; certain species of gutta-percha and rubber (greatly in demand); medicinal roots, herbs, and bark derived from the jungle; sago, gambier, and cûtch (probably); and many other products which as yet have not become articles of export to our country, and are only known to the natives in the interior, but which, through proper and wise agencies (unfortunately not to be found here), might, and probably will, become important articles of commerce. In another report I will allude to some of them and show many other and important resources, and hope to be able to prove conclusively that while it is well to pay all possible attention to countries south of the United States, this part of the world should by no means be treated with indifference or overlooked in the least, and that its immense resources offer very great inducements to active and direct American enterprise.

I have met Americans of high standing out here, who believe that nearly all the products exported from "Malaysia" to our country could be had or produced, if not already produced, in Mexico, central and tropical South America, and that, therefore, our merchants and business men, as well as statesmen, should turn their attention to those countries. Whatever correctness there may be in such opinions, I can point out that various articles of produce obtained in Malaysia (or Southern Asia), among them rattans, prominently, cannot be found or produced in countries south of the United States, and that other products, if they exist there—as tin, for instance—could not be had in such quantity, or of better quality, nor for the first price it can be had here.

TIN.

Tin, one of the most important articles of export in 1878, reached the low figure of $17.50 per picul, and many were the complaints among the Chinese miners on the peninsula and the traders on account of it. It did not pay to mine at that price, and large quantities being held by some capitalists, a desertion of the mines became imminent, and prices rose slowly, and steadily increasing demands from the United States helped to cause an upward tendency.

When tin gets lower than $22 the mining, generally, is not remunerative. Tin will and must always remain a staple article of export from this colony, owing to its inexhaustible presence as a mineral on the Peninsula of Malacca. As regards that metal, I have since I came here witnessed strange changes in the price of it. At first, in 1871 and 1872, the price was about $35, gravitating at that. Mob wars among the Chinese miners (Kongsee fights) occurred, and, as a consequence, tin rose at one time to $40 per picul, but only for a short time, and receded slowly to the old figure of $35. The opening of many new mines in various provinces on the peninsula as well as in Australia put a much larger quantity on the market, and stagnation times in America and in

Europe tended to decrease the price to the unremunerative figure of $17.50 at one time, as above shown.

CLOVES.

People that labor under the opinion that cloves do well only in the Moluccas and on the island of Zanzibar are simply mistaken. It thrives splendidly in this colony—this wonderful, lovely tree. Many years ago enterprising men (it would seem as if years ago, before the Suez Canal was dug and a submarine telegraph to Europe was made, British colonists were more earnest, industrious, far-seeing, and enterprising than they are now) on the island of Penang introduced and cultivated the clove tree, and it proved a decided success. It is to be found in some of the gardens of Europeans and wealthy Chinese hereabouts, and I never saw a tree yet that did not look sound and well, producing flowers liberally; and I have often wondered why no one here cultivates it largely, not to serve as an ornament only, but to derive benefit from it. In Penang it was planted for that purpose, and "Penang cloves" have the reputation, like the nutmegs, to be the best in the market, commanding a higher price than Amboyna (Moluccas) and Zanzibar cloves. But the consumption of this spice among the natives throughout the colony (and all India and the east in fact) is so large that the quantity left for export is very limited. It is the *bud* of the flower just before opening that constitutes the spice, and in this lies the difficulty that deters many from planting cloves for export. One having a quantity of trees will find himself busy about the time the buds (white in color, and strongly resembling snow-drops) begin to make their appearance. It must not be gathered before it, the bud, is well formed, just before opening; and as on a full-grown tree the number of buds is exceedingly large, the planter must have plenty of hands ready to gather them as quickly as possible, because the bud after opening—becoming a flower—loses much of its strength. Boys and girls from ten to fourteen years old answer best for this purpose, and they should live near by, to be ready for the work upon short notice. The bud-gathering time lasts a few days only, and "whoever does not make hay while the sun shines" will lose his crop of buds. The buds after being gathered are spread on large sieves or mats of loose texture, and dried under the shade of trees, or in sheds with palm-leaf covered roofs, and are then ready for the market. I am told that to dry them in the sun causes them to turn black and shriveled, and to evaporate rather much of their strength. A properly dried clove is of light-brown or tan color. The average price of cloves has been for a long time about $50 per picul. The shipments of cloves from this port to the United States have, last year excepted, never amounted to much, and all supplies were obtained from Amboyna chiefly.

PEPPER CULTIVATION.

Black and white pepper grow on the same vine; the green pepper-berries, just before maturity, after gathering, turn black and make "black pepper," while "white pepper" is obtained by gathering the berries—fire red in color—when fully ripe, and, through long soaking in water and subsequent stirring and shaking, relieve the berries of the outer skin; whereafter the latter, on being dry, become "white."

In what country the pepper-vine originated, I am unable to say; but Eastern history shows that the northern half of Sumatra, the once mighty old sultanate of Acheen (pronounced Atjeh, by the Malays), when the

Portuguese, Dutch, and British (in rotation) came to that country, was far famed for that spice, which drew, at Acheen busar in North Sumatra (near the entrance of the straits of Malacca), the native traders from many Eastern countries and islands, who there exchanged the products of their countries or purchased for cash. And during the reign of Queen Elizabeth and her successor, King James, British naval squadrons visited Acheen and met with a hearty reception from the Sultan; succeeded in making a treaty of peace and commerce with him, and, as a result, in establishing factories for and of the British East India Company.

After the British East India Company, during the last century, acquired the island of Penang from the rajah of Quedah, a Siamese souzerain (much interesting history is attached to this acquisition), so favorably situated for commercial purposes, and made it a very important factory and place of residence for a subgovernor (the famous Sir Stamford Raffles resided there for a long time) the great Acheen trade gradually drifted to Pulo-Penang (Prince of Wales Island), and with it the pepper trade, principally. At that time Singapore had not been acquired by the British, and not before 1819, when the island was covered with a dense trackless jungle.

After the acquisition of Penang the natives on the peninsula of Malacca, especially in the province of Frang, a Siamese souzerain province, commenced to plant pepper, and with excellent success; and now it is extensively planted by Malays and Chinese in many places on the Peninsula of Mallacca, also in Siam, Cochin-China, and in Sarawak, Borneo. That grown in the southern part of the peninsula and on the island of Singapore, known in the market as "Singapore pepper," is by far the best, commanding a higher price than Acheen pepper.

Penang maintained the Acheen pepper trade until the Dutch commenced their war of conquest in Acheen in 1873, blockading the coast and preventing the exports of all Achenese products. At that time, owing to the spread of wild rumors about the destruction of the pepper gardens in Acheen, &c., pepper reached the figure of $14 for a short time. It was feared, the supplies from Acheen being cut off, that the spice would become scarce, and as a consequence many Chinese planters increased its cultivation; in fact, to such extent that the Acheen war was no longer looked upon as the cause of influence in prices. Later some of the chiefs of certain Acheenese provinces, having submitted to Dutch rule, were allowed to send pepper to Penang on vessels having a permit from the Dutch consul in Penang to supply them with rice and other needed goods. Then it happened that some of the rajas who had submitted to the Dutch, after having been pretty well supplied with the necessaries of life, turned truant again, and, as a consequence, their coasts were again blockaded, or it was discovered that some of them had received contraband of war, and were, therefore, put under close restrictions. At any rate, the "old Acheen trade" at Penang has become seriously crippled since that war commenced, but contractors in Penang profited heavily by supplying the Dutch army in Acheen, owing to proximity, with beef and other and many necessaries of life.

The Dutch are now making efforts to make "Ole-Seh," the old port of Acheen Busar, in fact well protected by a fort and man-of-war, a trading port, and to export "Acheen pepper from Acheen" themselves; at least so the Java and Singapore papers inform, and I presume they will. As I shall in a future report write about Sumatra and her provinces again, I will not now enter upon any further details about "Atjeh."

As to the pepper-vine it presents a very handsome appearance; a pepper-garden at a distance looks like a "hop-yard." Some planters,

however, trellis the vine, and I think myself that it is the best plan. It grows everywhere round about here very easily and luxuriantly on fair upland soil, not liking low heavy soil, and like the grape-vine needs occasional pruning, weeding, and fertilizing. With a little care and attention it yields abundantly and proves a good source of income. The quantity of pepper exported annually from the Malay peninsula and ports in Dutch India is simply immense, and is almost exclusively planted, gathered, and brought to market by natives, Malays and Chinamen chiefly.

GAMBIER.

Another staple article of export is *gambier* (terra japonica), derived from the gambier vine, which latter is most extensively planted by Chinese exclusively on this island, in the province of Jahore and other provinces on the Malay peninsula, and in Sarawak, Borneo, as well as on several islands in Netherlands India, south and near Singapore.

This vine grows so luxuriantly and bushy that it will exhaust the fertility of the soil in a short time. After a few crops (clipping of the shoots and tendrils) the land is abandoned, and proves worthless for several years. Notwithstanding this, the demand for gambier is constantly increasing, and with it, of course, the cultivation of the vine. Gambier planters are constantly on the move for new lands, which they clear and make ready for the time when the fertility of the last plantation is exhausted. They rarely fertilize, because wild jungle land is as plenty as the wild tracts of prairie in our West. It will not pay Europeans, with their usual mode of planting in the East, to engage in planting gambier at the present prices, and Chinamen only can exist by it. Other natives, Hindoos and Malays, could also exist by it if they were possessed of the industry and stamina for making money as the Celestials are. Rich Chinese capitalists, known here as "Towkays," upon the arrivals of ship-loads of poor coolies from China either hire them and make contracts with them for planting and boiling gambier, or they advance them money upon conditions of obtaining a certain share of a crop, and take care that they receive the "lion's share." Those gambier-planting coolies are little better than slaves, since, as a rule, they only earn a scanty living. But it is wonderful with what tenacity they stick to their "Towkays" until they get a little better acquainted in the country, and find they can do better at something else. By dint of careful management and great industry some of the coolies that plant on shares earn a little more than a living, and invest this in such a careful manner in something or in some way, that in a few years they become small "Towkays" themselves, and pretty soon wealthy ones. I could point out to-day in Singapore immensely wealthy Chinese "Towkays," who were once gambier-planting coolies. The same or a similar mode is observed in tin-mining.

The only marketable gambier is obtained ("cutch," or "cutechu," a species of gambier, planted in British Burmah, and the coast of Tenasserim also) by boiling the clippings (shoots with leaves and tendrils) of the vines in huge boilers; the mass is strained and the extracted juice is boiled until it becomes thick; when cooled it is pressed into square blocks or "cubes." When pressed into small cubes it goes into the market under the name of "cube gambier." The latter sort commands a higher figure because it is treated with much greater care and is more free from foreign matter.

Gambier possesses "tannin" in a high degree, and is exported chiefly for tanneries in Europe and America as a very excellent substitute for

bark. It is also used for dyeing, and in a purified state for medical purposes, being a great astringent. I have also been told that beer-brewers purchase it, but I have been unable to learn for what special purpose—I suppose to give beer a dark brown color; if so, while it serves to cheat, it is at least harmless if not used too freely.

When I first came here gambier was not largely exported to the United States, and rather to Europe, England principally. At that time it vacillated between $3 to $3.50 per picul, and that figure was (for the common usual sort and not "cube") not often exceeded until the latter half of 1879, when it gradually rose, owing to unprecedented demands, to $4 and over, and this without getting lower than $4 to the present time.

The exports of gambier to the United States during the last three years have been as follows:

To September 30, 1878, 57,820.85 piculs; value, $269,048.84.

To September 30, 1879, 151,290.85 piculs; value, $686,655.10.

To September 30, 1880, 219,050.22 piculs; value, $1,060,619.05, or 28,544 tons (of 2,000 pounds). Considering this large quantity, I judge that it is extensively used in tanning and must be regarded at home as a profitable material for that purpose, which opinion I fully share.

The blocks, in which shape gambier is exported, being very heavy, the article comes very handy as "dead weight" to ships loading produce, more especially since nearly all the tin for the past five or six years (the longer the more so) is shipped in steamers to the United States. The more gambier a ship can get the sooner she will be able to complete her cargo and go to sea. It is to be regretted, however, that nearly all the tin, being the best and easiest handled "dead weight" is, now-a-days, shipped by steamers, carrying nearly all tea as chief cargo. Tin comes very handy to them because it is heavy and clean, and, being cast into blocks or slabs, it can be carried easily to any part of the ship for the purpose of "trimming the ship." Since I have been here many tea steamers, with full cargoes, took tin here free of charge, or for a trifle, glad to get it for the purpose of "trimming ship." Gambier would not answer the said purpose well, because, being a resinous mass and yielding to heat, it would melt and play sad havoc if used for trimming ship among tea-chests.

RATTANS.

Rattans (from the Malayan word "rotan") have, as regards our country especially, become a more interesting article of export from this part of the globe than ever. The largest quantity of this tough, extremely elastic, unyielding, and valuable species of cane—the great usefulness of which can only then be properly appreciated by one, after having seen among the natives of Southern Asia, regardless of race, the very great many purposes it answers—destined for the United States is shipped from this port; the remainder also, in large quantities, being shipped from ports in Java, and from Padang, Sumatra. Here and there it serves the excellent purpose of filling up a ship's hold, after all the heavier cargo, in boxes or bags, has been taken on board, with "light weight," tending to complete a cargo very thoroughly.

I have written about this valuable product of the dense jungles (it disappears, naturally, in the neighborhood of settlements) to some extent in some of my former reports; but, for the information of those who have not read such reports, I will repeat that the ratan is found nowhere else on the globe than on the peninsula of Malacca, and on the large and smaller Sunda Islands (Malayan Archipelago) wherever

a dense, heavy, unbroken jungle rests. I believe it is also found in New Guinea. It may safely be said that it exists strictly between the twelfth degrees north and south latitude in the "Indo-Malayan Archipelago," and it succeeds, best in quality and quantity, between the eighth degrees north and south latitude. There are certain parts, or provinces, within the last-mentioned belt on the peninsula of Malacca, Sumatra, and Borneo, where it thrives best (on hilly and undulating, on a sandy soil, mixed with clay, friable and porous).

In Sumatra and Borneo the best, highest-prized canes are obtained. Good judges pronounce those from the districts of Palembang and Siak, in Sumatra, and particularly from the province of Jambi, within the Palumbang Residency, as the very best. Under the name of "Jambis," they go into the market. The next best are those called "Long Passers," and are obtained in the two large Sumatra districts just named, as well as in the upper valleys of the Muar, Pahang, and Indan Rivers, in Southern Malacca, also from the interior of Tringaun Batani, Perak, and other Malayan provinces under British and Siamese rule. Those from Borneo, going into the market as "Banjirmassin" and "Coti," named after the places of export, under Dutch rule, are as highly prized as "Long Passers." Large quantities also come from the provinces of Pontianac, Sarawak, from the valleys of the great water-sheds of Borneo, as the Bruni, Kinabatangan, and Kimanis Rivers, within the still independent sultanate of Borneo (in treaty with the United States), and brought to market at Singapore, are assorted, classed, and named by the middle traders. It may be possible that many Borneo and Malacca ratans, carefully selected, go into the market without detection as "Jambis" or "Long Passers" (the Malay word *passir* means in English, "sand," and I suppose the Malays named them in that way because they thrive best, obtain the greatest length, on sandy loam).

The change the "rattan trade," as regards the United States, has undergone, is simply wonderful. Some parties must have become rich through the same, but I greatly fear that among them some of our purchasers at home cannot be reckoned. I am afraid that the poor jungle Malays, who take their lives into their hands to gather ratans in dense jungles, swarming with wild beasts, poisonous reptiles, and insects, if they profited any in the general and steady advance of prices it was very little. Living, as they do, in remote places, rarely visited by civilized people, and only by the bartering keen agents of middle traders, who take care not to enlighten them, they had not the necessary knowledge to demand a better reward for their labor upon unanswerable arguments. The "lion's share," in my opinion, falls upon the Chinese middle traders, and some of the exporting firms here and in India.

When I first came here the average price of rattans was about $4.50 per picul, ranging between $3 and $5.50. Compared with the last four or five years the demand for rattans from our country was then very limited, and was greatly exceeded by demands from Europe. The greatest quantity of all rattans then sent to our country was for the port of Boston, and exported hence by one firm chiefly. I can remember that other firms here, in order to complete cargoes with "light weight" (also as "dunnage") on vessels chartered by them for New York, shipped rattans for their own account and risk, and they often complained to me that their agents in New York found no sale for them, and that either they lost money on them or found no profit.

A few years ago parties in New York established rattan factories in competition with those in Massachusetts or elsewhere, and as a consequence a lively demand for the cane out here ensued, as well as a com-

petition among the purchasing firms for the better and best grades. All this caused a turning of the table. Rattans which five years ago could be had readily for $6 per picul, for several months back command from $14 to $16. If the average price nine years ago was $4.50 per picul I should call it now $11 safely. The export of rattans to the United States exceeds that to Europe this year. An immense quantity was sent to the United States to the two competing ports, New York and Boston, and I often asked myself, "What are they going to do with all those rattans," at such very high prices. If the demand at home for manufactured goods is equal to the demand for cane here, it certainly must be the sign of great prosperity in our country, and let us hope not a running race "*a tout prix*" between competing manufacturers for the special benefit of Chinese middle-men and exporters out here.

The quantity of rattan exported to the United States during the three years ending September 30, 1880.

	Piculs.	Invoiced value.
To September 30, 1878	34,043.88	$226,188.09
To September 30, 1879	63,110.86	513,435.84
To September 30, 1880	60,384.49	625,662.69
Total for three years	157,539.23	1,365,288.62

NUTMEGS.

Nutmegs and mace belong together, the latter being the inner covering of the nut. This most interesting, and, in its natural fresh state, lovely spice, seems to be an especial favorite with the American people, since the export thereof, of the nut especially, to the United States exceeds that to all Europe combined. The home of the nutmeg in reality is New Guinea (Papua), where it grows wild, and it is possible that in times past (and now) the famous and daring Bugistraders, who alone ventured to visit certain parts of the coast of that far-famed island to obtain the most noted products, by way of barter with the extremely barbarous and hostile inhabitants (a very low grade of humanity), brought away certain quantities thereof. The most reliable place of production of obtaining them, agreeably with the demands of the market, has ever been the island of Banda and probably other islands, among or near the Moluccas while the island of Penang and this colony furnished also its quota, the quantity increasing gradually. The nutmeg thrives well, also, with a little care, on certain parts of the peninsula, and if the Colonial Government had given hitherto a little more fostering care to its cultivation (also of the clove tree) a much larger quantity might have been produced. In Deli, Sumatra, nearly opposite Penang, where the tobacco-planters labor under the idea that their rich soil after having produced one crop of tobacco, will not produce a second (on newly cleared jungle land) sufficiently good to pay, and that the land must lie fallow for six years (grow up in jungle again), some of them a few years ago became happily possessed of the idea (!) whether during those six long years the tobacco lands might not possibly, since jungle grew on it again in amazing luxuriance, produce something else "that would pay," and a few of these intelligent tropical husbandmen concluded to plant nutmegs.

Those that understood "farming" well enough to select lands "above overflow" succeeded on an average pretty well, with the assistance of intelligent native gardeners.

In the Moluccas it has ever been proverbial (see "Wallace's work on

the Malayan Archipelago") that the young nutmeg-tree will only grow well when planted beneath the shade of the canary-tree. The Deli planters, or their gardeners rather (Boyans, Javanese, or Chinese), had no canary-trees ready grown (it belongs to the Moluccas, but if planted here would grow equally well) to order, and finding that on Penang Island the larger nutmegs were not reared under canary-trees, they planted pisang-palms (bananas) in drills, at such distance apart that the broad, long, and wonderfully magnificent leaves would amply protect the young nutmeg seedlings from the rays of a tropical sun. They succeeded on good uplands very well in this. This additional cultivation cost them very little time and money comparatively. A pisang-palm taking up shoots from the roots of full-grown palms, or an old tree cut off "stump-high" above ground and transplanted, will be in full foliage, and over five feet high, in a few months, so that the nutmeg seedlings can be transplanted shortly after the pisang-shoots.

Six good coolies, at 20 cents wages per day each, with a hand-cart could soon plant a large piece of fallow tobacco-land in nutmegs. In the mean time the tobacco-planters, who looked upon this as an experiment that would not cost them much, and paying little attention to it, went on tobacco-planting, looking upon that as their object and actual source of profit, as it takes about five years until the nutmeg-trees commence to bear. Some of the planters had crops of fine nutmegs to send to market at the end of that time, in addition to all the tobacco they produced and shipped during the same period. The nutmegs being good and large could enter the market as "Penang nutmegs,"—an innocent, cheap enterprise that turned out well, the nutmegs being worth about $70 per picul, unselected, and mace, if slowly and neatly dried, not scorched, about from $40 to $50 per picul. It takes 110 fair sized nutmegs to make one pound (1 picul = 133⅓ pounds at $80) worth 60 cents; and since a good full-grown nutmeg-tree in full bearing can produce several bushels of nuts with the hulls on, it can be easily seen that the "experiment" turned out well. Such of the planters as had their wits about them, the price of Deli tobacco having fallen during the last two or three years nearly 50 per cent. against former years, and yielding little or no profit at the present time, can now stop tobacco-planting and find old tobacco prices in their nutmeg groves until the price of tobacco rises again. The number of the "successful," however, is not large; but will, after such a demonstration, become larger, it is supposed.

The nutmeg tree will grow well on the coast of Borneo and adjacent islands, as well as in the Malayan States on the peninsula, under British and Siamese rule (the clove also quite well), and, as we have very advantageous treaties with both countries, I point this out. I will have more to say upon this and kindred subjects in a future report. As I have stated, the United States buying more nutmegs than the whole of Europe taken together, some of our enterprising young men might perhaps spend some time profitably in reflecting upon this.

I will show the amount and value of the nutmegs exported during the three years ending September 30, 1880, viz:

	Piculs.	Invoiced value.
Ending September 30, 1878	4,262.76	$235,912 39
Ending September 30, 1879	3,808.52	267,947 87
Ending September 30, 1880	1,850.40	178,768 02
Total in three years	9,921.68	682,628 28

In 1878 nutmegs were very plenty and cheap, and I can remember that at one time the best (100 to 110 per pound) brought only about $60 per picul, while small nutmegs often only brought from $25 to $50. After 1878 the prices rose constantly, while the exports decreased. This remarkable decrease is accounted for in this way, that a large quantity of the Moluccas nuts, formerly shipped via Singapore, were shipped from ports in Dutch India, and that our importers at home ordered from this colony the higher grades of nutmegs chiefly. Further, some of our importers used to obtain their supplies of nutmegs from Singapore, and either not knowing that the Moluccas were the chief place of production, or that they could be had as readily from Dutch India, and probably for less money, continued sending their orders to Singapore, and there being a scarcity of them here, as a natural consequence it drove up the prices, while there had been no falling off in supplies in places of production.

SAGO.

This wholesome and nutritious article, derived from the pith of the sago palm, has ever been largely exported from this part of the world, where it belongs to the flora of several islands of the Malayan Archipelago. It was an important article of export when I first came here, and has increased steadily in importance ever since. It goes into the market as "pearl sago" and "sago flour," the former requiring more labor in its preparation than the latter, costing about 50 cents per picul more. The average price per picul (133⅓ lbs.) since I have resided here for sago flour has been about $3.50, and pearl sago about $4, experiencing less change than any other article of export I know of. A large quantity of sago goes to China and to the United States; but by far the largest to Europe, especially since the breaking out of the Russo-Turkish war; but during the last 18 months unusually large quantities have been shipped to England.

Pearl sago is everywhere used, in cookery principally, and some of the sago flour is also used in that way; but the most of the latter is used in the manufacture of the higher grades of starch, as well as in the manufacture of chocolate, and I am told in sugar factories. It is the export of sago flour that has increased more than that of pearl.

I had inquiries from judicial official and unofficial sources as to whether sago flour is not "starch," and I have answered and do now state that it is in reality "starch," needing only a slight process to go into the market as the article which is called "starch." Sago flour is prepared to answer the purpose of starch; is the same as our common starch when prepared for use, with the only difference that the sago flour is of a higher grade, having more binding quality and gloss than common starch, but a little less farinaceous matter; *i. e.*, it is a starch that possesses more gluten aud less farina than common starch. For this very reason, sago flour is largely used in the manufacture of a higher, dearer grade of starch, and, for all I know, corn-starch factories may not be strangers to it. If so, there is no harm in it.

Sago flour and pearl sago are obtained and manufactured in this way. The sago palm is felled and the trunk split open from one end to the other, and the pith or marrow (resembling brittle wood with large pores) is dug and scooped out in chunks and thereafter grated on large graters or rasps especially arranged for that purpose. The grated matter, now pulp, is then washed through cloths of very coarse texture (sieve-like), the sago matter falling through in a tub underneath. The tubs are emptied into large vats, until the mass thus emptied has a depth of

about eight inches, and then a little more pure spring water (good pure spring water is very essential in the manufacture of sago, tapioca, and arrowroot) is poured over it and the matter is allowed to stand for several hours. Thus, all particles of fiber wood or foreign matter separate themselves from the sago matter. The water is then poured off, the matter removed to other and clean vats, and again fresh water is poured over it to a depth of a few inches, and the process repeated until the manufacturer finds that the matter at the bottom has cleansed itself sufficiently (washing in the waters generally suffices) to undergo the final manipulation. The matter then taken out is new starch (the same holds good of tapioca and arrowroot). The roots of either are washed and ground into pulp, whereafter they undergo the same process as sago, as far as washing, obtaining pure starch, is concerned. (Arrowroot is planted by some natives in small quantities, but is not, and never has been, an article of export, counted such from this colony.)

If sago flour is wanted, the starch, while still a little wet, is cut in chunks (like bricks) and dried by exposing it to the sun. When dry, it is broken and passed through a cylinder (two wooden rollers answer the purpose) and comes out as "sago flour" ready for the market. If "starch," to look like our common starch, was wanted, it would be only necessary to press the wet starch through the bottom of a collender and to dry what passed through. For pearl sago the "starch" taken from the vats while still damp is rolled out like dough for pie crusts and pressed through a sieve, producing little pellets. The latter, after having been rolled a little upon a smooth board, are placed in huge iron pans, heated by a low and slow fire, and are constantly stirred to prevent scorching. The heat tends to toughen the matter and to bind the glutinous with the farinaceous ingredients. When sufficiently tough and hard the matter is ready for the market under the name of "pearl sago." Flake tapioca undergoes the same process, with the only difference that the starchy matter is shaped into flakes instead of pellets.

The largest quantity of sago exported is manufactured at Singapore, and much of it goes to Hong-Kong. Some time ago, through an unofficial source, I was informed that Chinamen in San Francisco imported arrowroot in boxes from Hong-Kong, and my informant having been informed that this was a fraud, and that the high-priced arrowroot was simply sago flour manufactured in Singapore, asked me whether "arrowroot" was an article of export from China or this colony. That it was an article of export from this colony, except in very small quantities to private parties (a common wine bottle full of arrowroot is worth here 50 to 60 cents), of this I was certain, but did not know whether it was an article of export from any port of China; and to obtain reliable information I asked the late Hon. H. A. K. Whompoa, then consul for Russia, China, and Japan, upon the subject, and he informed me, proving it by the custom laws of China regarding exports, that it was not an article of export from China, and that it did not exist there at all. Other well-informed Chinese business men here confirmed all he said. Hence, if Chinamen in Hong-Kong shipped sago flour under the name of "arrowroot" to our Pacific coast, and charged for "arrowroot," they must have made a handsome profit; though it seems to me that merchants dealing in either article, or in both, should have discovered the difference, if by nothing else than color.

Arrowroot is whiter than sago flour, because it contains more farina and less gluten than the latter, causing the latter to be a trifle darker. I have also been asked whether sago flour exported to the United States

is not adulterated by foreign matter or matters. This I hardly believe simply because sago flour at $3.50 per picul is too cheap to invite adulteration.

I have also been asked about the probable number of sago palms and the extent of territory producing sago palms. That, particularly the number of palms, is as unanswerable a question as to say how many hickory trees are in the hard-wood-producing States of our country; if anything, more so. But I will give as much information upon the subject as I can, based upon careful inquiries from reliable sources.

The sago is a palm tree, as we all know. It takes at least five years before a palm is fully grown and sufficiently remunerative to be cut down for sago. It needs no replanting, as new shoots come up from the roots of the late palm. A fully-grown palm will yield from 4 to 6 piculs of pith. It grows wild in the jungle, and seems to thrive best on river bottoms subject to overflow, but will also grow on fertile uplands. It is generally accepted that the sago palm grows on the Island of Borneo; it grows there in very large numbers almost everywhere, and Borneo furnishes by far the largest quota of all the sago exported. In the interior of Borneo, along river courses, the natives make rafts of the palm trunks, and float them down to the trading settlements, where the pith is taken out, tied up in bundles, covered with palm leaves, and shipped to Singapore, or places where sago is manufactured. The Borneo sago palm is counted the most remunerative as to quality and quantity.

The sago palm is also found in parts of the island of Celebes and various islands of the southeastern Malayan Archipelago, where rice not doing well or not cultivated, sago is the staff of life of the natives, who, in a very primitive and ingenious way, extract the sago matter from the pith and bake bread or cake out of it, and live well on it. The sago palm is very plentiful on all those islands, and it is the business of the natives to see that it is, else they would suffer; but as far as I have been able to learn, it is not an article of export therefrom, simply serving to feed the people. Now some of these islands are very large indeed; much larger than many people who see a map of this part of the world, dotted with small spots and names, without interesting themselves about them, can have any idea of. The palm on those islands is found in and out of the jungle, and considering in addition thereto that the island of Borneo has an area of about 240,000 square miles, and is larger than the United Kingdom of Great Britain and Ireland taken together, that the interior is a perfect unbroken wilderness—a *terra incognita*—and that at a rough guess, very probably nine-tenths are covered with jungle and jungle swamps, and high mountains, more or less covered with forests and a mass of tropical vegetation, it is impossible to obtain an adequate idea of the extent of the existence of sago palms.

The sago palm also exists in larger or lesser numbers on several of the islands near Singapore, and on the mainland of Malacca, in and out of the jungle; but it is my opinion that it is not indigenous, that wherever met with it was planted. Many natives plant it on river bottoms, on old abandoned rice fields, seeing an easy source of profit in it, since, after a piece of sago root has been stuck in the ground, it needs no further cultivation and will take care of itself. Of recent years the planting of these palms has been largely on the increase on the peninsula near Singapore. If the exports of sago have been heavy and constantly and vastly increasing, no fears need be entertained that the supply will fail to be equal to the demand hereafter.

TAPIOCA.

If it has ever been a good article of export, the demand for it for the United States, as well as Europe, has constantly increased during the past three years, and with it the price. In 1877 the average price per picul (flake, pearl, and flour) was a little over $5, and gradually rose from $5.75 to $6 in 1879. The demand increasing constantly, it induced many Chinese and some European planters, both on this island and on the peninsula of Malacca, to increase its cultivation largely—a good many thousand acres over former years. And in places in Sumatra, where it never had been planted worth mentioning, some planters engaged in its cultivation.

In the provinces of "Malacca" (on the peninsula of the same name) and "Wellesley" the demand for wild government lands by Chinese planters was especially lively. The price of tapioca during the latter half of last, and a short time of this year, went as high as $6.75 for choice goods, and it may be said averaged about $6.50. Large supplies coming in, while the demand did not increase, caused a reduction in prices and continued until the article became lower than it had been for years. I am not aware of any probable cause in the future which would lead me to think that the price will rise, keeping in view, as above shown, the vastly increased cultivation of the root. It takes at least a year from the time of planting, on very good land at that, before tapioca roots have obtained a size that will pay to dig them out, and my private opinion is that it should not be taken out before from 15 to 18 months. The crops now growing on the vastly increased acreage will be taken up for manufacture in the course of next year, and the supplies coming to market will be very heavy. Below $4 to $4.25 per picul the price cannot fall, because below that figure the article ceases to be remunerative for the planter. The manufacture of tapioca, after the roots have been dug up, is about as expensive, if not more so, as its cultivation (which is simple and easy enough), requiring a good deal of machinery, a good and ready arrangement for obtaining and conducting to a factory a liberal supply of clear spring water, the large vats, the pans and heating and roasting arrangements, fuel, quite a goodly number of hands, &c. The Chinese are a great pork-eating people, and their countrymen planters breed swine very extensively, and being really very good husbandmen, they know well enough that when marketable tapioca leaves them no profit they will find it by fattening hogs on the tapioca roots, which, with its unusually large percentage of farina and gluten, has probably not its equal for such a purpose.

There is nothing I know of that resembles a large French chestnut (the "marrow") in its raw state more than raw tapioca, and roasted also, only that it is fatter or richer, having more gluten and a little less sugar than the chestnut.

GUTTA-PERCHA AND RUBBER.

These products have been a very important article of export from this port and Netherlands India, more for England and France than the United States, but during the past two years the exports thereof to the United States have greatly increased.

Both gutta and rubber are found in the heavy jungles of the peninsula of Malacca, Sumatra, Borneo, Celebes, and other large islands in the Sunda Archipelago; but the largest quantity of gutta, as well as the best quality, is obtained from Borneo. It used to be very plentiful in accessible places, *i. e.*, in the water-sheds of the peninsula, and of ex-

cellent quality, but the native gatherers, in order to obtain a goodly quantity in as short a time as possible, instead of tapping the trees judiciously, cut them down very promiscuously, and as the tree is of rather slow growth, the field of supply for years to come will remain more or less exhausted. In the remote fastnesses of the jungles of the peninsula, especially in the Malayan states under Siamese souzerainty, where the peninsula is broadest, it exists in abundance, but the hardships and danger to gather and prepare the milk as well as to bring it to the coast are too many and too great, and until those parts are developed by enterprising men the supplies therefrom will remain light. The same difficulty exists in many parts of Sumatra.

The rubber tree is more plentiful than the gutta tree on the peninsula, and of much faster growth, and fair supplies are still obtained.

I am glad to say that the colonial government is encouraging the planting of gutta trees (various species), and of rubber trees also in some of the Malayan provinces. The Netherlands-India Government, also, I am told, has taken steps to save the trees and foster their cultivation.

The prices range from about $30 to $60 and $65 per picul and still higher. Both come into market in the shape of a large ball, a loaf of bread, or a small cheese. A very good judge is required to make proper quotations. First, it is judged according to color and solidity of mass; the whiter and more solid (of uniform color), the higher the price. Every lump coming into market must be cut asunder, not only to judge the quality, but to see whether any fraud has been committed by the native gatherers, by mixing stones, lugs of lead or iron, gravel, or sand into the mass when soft and warm, just before giving it the shape already mentioned, to make it weigh heavy.

Sometimes no fraud has been attempted by the natives, but the milk has been gathered in a shiftless, indifferent manner. It must be understood that the milk (susu in Malay) is thick and sticky, and that shortly after exposure to the air it becomes compact or solid. If, for instance, the milk from a tapped tree, instead of being caught in a vessel should fall on sandy, porous ground, it would not be lost in, or sink through it, as water or thin liquid does; it could be gathered, but owing to its resinous tendency a crust of earth or sand would stick to it—be taken up with it. Some natives after tapping a tree insert a spile and catch the milk in troughs and other tight vessels; some again catch into baskets lined with palm or other large leaves; and the milk thus caught is clean, free from foreign substances; others simply tap the tree and main branches in various places, and let the milk run whither it wants to, down along the trunk or on the earth, and take or scrape all foreign substances adhering to it with it. When caught neatly or purely, the mass, without any further process, is exported under the name of "gutta susu" (gutta in state of milk). When not shipped under that name, the milk after having been gathered is slowly, gradually boiled in large kettles filled with water, for the purpose of cleansing it. Through heat it becomes soft, and sand and earth will fall to the bottom, while bark, chips, grass, or leaves will come to the surface in a scum, and can be taken off. As soon as the water has sufficiently cooled to permit handling the mass, the latter with the water is dipped out into a large trough or bowl; the mass is kneaded to squeeze the water out and to give it the shape in which it goes into the market. It is then, during the kneading process, that heavy substances, as lead, iron, stones, &c., are worked into it. For this reason the lumps must be cut, as well as to ascertain whether the "susu" has been boiled properly—all foreign substances removed.

GUM COPAL AND GUM DAMAR.

Gum copal and gum damar, both very important articles of export in large quantities steadily increasing, and in price as well, have been exported.

Gum copal is a rosin of the earth, of which there are very heavy deposits on or near the island of Ternate in the Southeastern Archipelago, and at Gorontalo or Celebes, near the Moluccas. As we all know, it is used in making varnish, and nothing here could have been a better barometer of increased manufacture and building of edifices and vessels in the United States than the increased demand for this valuable gum. The average price of gum copal, including all charges, per picul, in 1878 was about $6.90, in 1879 about $6¾, and in 1880 about $12.50. Truly a strange change; and the deposits of the gum being regarded inexhaustible, I cannot account for this enchancement in 1880, except as the result of an eager demand for immediate use, old supplies having been exhausted.

Gum damar (some call it and write "dammar" which is too strong an expression, and does not sound as the Malays pronounce it, *i. e.*, sounding like damar, if pronounced by an Italian)—unlike gum copal, which is of brown color and a rosin of the earth—is a tree-rosin of light amber color, and when prime almost white and transparent. It exists in the jungles of the Malayan Peninsula and on the island of Sumatra and other adjacent islands. That brought from Sumatra is counted the best, though, I have, myself, seen it on the branches of trees in the interior of Malacca, and it had as clear and white an appearance as any I have ever seen. There are, however, various species of damar trees, each producing a different shade in the color of the gum.

The gum-trees are not at all scarce. I found them always growing on the banks of rivers and creeks, the branches overhanging and so low that the gum could be gathered easily from a boat underneath, and from the most of them no gum had apparently been gathered, the branches having large adhesions of it. The price of this gum has been on a slow, constant rise for several years back, but I could not account for it through any scarcity of it in the jungle, or a scarcity of natives to go and gather it, without any hardships, except rowing and raising the hands to gather it.

The following exports to the United States of gum copal and gum damar have taken place during the three years ending September 30, 1880, viz:

GUM COPAL.

	Piculs.	Invoiced value.
September 30, 1878	5,027.32	$34,782 81
September 30, 1879	15,705.65	105,601 67
September 30, 1880	18,442.64	231,035 09
Total three years	39,175.61	371,419 57

GUM DAMAR.

September 30, 1878	1,103.62	20,413 81
September 30, 1879	1,718.88	36,560 48
September 30, 1880	510.71	13,703 00
Total three years	3,333.21	70,677 29

COFFEE.

Singapore has ever only been the market-place for coffee grown in provinces or on islands in Dutch India, not within the governmental coffee-monopoly districts, and simply under Dutch suzerainty; as, for instance, the coast of Bonthain and Parch-Parch, on the island of Celebes, the islands of Bali, Lumbock, Sumbawa, Timor, &c., and the province of Palembang, in Sumatra. The Peninsula of Malacca (though in some of the mountainous provinces the Malays planted coffee in small gardens, more for home consumption than export) has to within a year ago not been considered a coffee-exporting country. I think it will be henceforth, but I will dwell upon that subject in a later report.

The largest quantity of coffee ever exported from this port to the United States was from Bonthain, in Celebes, facing the Straits of Macassar. It is more than likely that coffee from other places and islands near Bonthain was, also, shipped under the name of Bonthain. If so, it made no difference, coffee from any of those parts being all good when properly treated after picking. I consider "Bonthain" as good and aromatic a coffee as any grown in either Java or Sumatra. It must be remembered that coffee grown in Bonthain or in any other of the Suzerain Malayan Provinces of Dutch India is cultivated, picked, and prepared for the market by natives entirely, without the supervision and advice of Dutch Government officers, and without having pulping and hulling machines, in a primitive and simple manner. In the absence of pulping machines, they often bury the berries to cause the rotting of the pulp, and to enable them to work the pulp easily from the parchment skin that covers the beans. By times, when buried too long, the coffee gets overheated, and, as a consequence, some of the beans turn black after removing the hull and becoming exposed to the air. Now, the natives bring the coffee to market, good beans, black beans, plentifully mixed with hulls, and sell in that way.

The first thing the coffee-exporting purchaser must do is to spread that coffee on a large tight-loft floor, and have it turned often, and when dry, to have it passed through a fanning mill to clean it from hulls and dust, and after that the whole mass of coffee must be picked *by hand*, and very carefully, to take out all the black beans, because a very few black beans in a bag when in a ship's hold and sweating, as coffee does, are able to spoil it entirely by imparting to it a bad odor and taste, especially when coffee has been buried in the ground tied up in *goat skins*, a process often pursued by the natives, especially on the island of Bali. On the coast of Bonthain this latter uninviting process has been pretty generally discontinued, but not on the island of Bali. For this very reason Balinese coffee, though if properly handled, excellent, is always quoted from 35 to 40 per cent. lower in this market than Bonthain coffee, and none of it is exported to the United States at all (chiefly consumed by the natives here), while some, I believe, finds its way to Europe.

Now the Bonthain coffee trade (including Timor-Deli and other islands near Celebes) is a very important one, the production being very heavy. Before the Dutch Government made Macassar, situated close to the coast of Bonthain, a free port, nearly all that coffee used to come to Singapore, but after that a goodly portion went to Macassar, the quantity gradually increasing; and, from all I can learn, during the last three years a very large portion of it went to Macassar, whence it was expedited to Europe and the United States direct. During the last year the coffee trade fell off considerably in Singapore.

Notwithstanding the nearness of Macassar to Bonthain and the whole

Southeastern Archipelago many native traders, the Bugis especially, will pass Macassar and come to Singapore during the southeast monsoon, the latter port being a great favorite with them, because they find a much heavier commerce here, a greater assortment of such goods as they wish to take back with them for barter with native producers, more competition for selling and buying, and also to visit their many friends residing here on the peninsula.

The district of Palembang, in Sumatra, sends a good deal of coffee to this port. This district, unlike Padang, farther up (north) the west coast, is not subject to the Dutch Government monopoly, and there the coffee is all planted by the Malays, but they receive a certain supervision and advice from the Palembang residency. About this district and provinces adjacent thereto I have obtained pretty reliable information. It is one of the richest, most productive districts in all Dutch India, and blessed with large fine rivers tributary to the main river, the "Moosie," and contributes heavily to the market at Singapore, as well as to ports in Java and to Padang. It sends out, as already shown, the best known rattans, also large quantities of gutta, rubber, camphor, and other gums, pepper, oils, excellent tobacco, much good coffee, &c.

It is to be regretted that the port of Palembang, owing to bad approaches, can only be reached by small vessels of light draft of about 300 to 400 tons. The town of Palembang, with the Dutch presidency, is situated a goodly distance above the mouth of the "Moosie" River, and the latter (much like our Mississippi River) has several mouths or passes divided by islands, and there are rather shallow bars to all of them, and outside the bars the coast has many shoals and sand banks. A goodly number of vessels since I have been here ran ashore on the coast of Palembang with more or less damage, and in former times, more than now, many have been lost there. For the rest, the Dutch authorities never encouraged foreign transoceanic vessels, whether they could cross the bar successfully or not to visit Palembang, probably fearing that contamination between the natives and foreigners might have an unwholesome tendency upon some of the disaffected native tribes in that vicinity, though they have nothing to fear on that score any longer, particularly not as regards our vessels.

Now, the interior of Palembang and adjacent countries is well cov ered with high mountains, more or less volcanic, and *it is on volcanic soil the best coffee grows.* The natives there in times past always planted coffee for their own consumption, and a little for export that received much favor. Padang coffee grows on the same range of mountains.

The Dutch Government encouraged the natives to increase the cultivation, and the latter, finding that they profited largely by it, with ease, some of them getting quite wealthy, increased it constantly, and during the last two years they had heavy crops, which went in part to Singapore and to ports in Java, but in what proportion I am unable to say. The Dutch doing all they can to encourage and foster the coffee cultivation (and of other products as well), Palembang district in a very few years will be one of the foremost coffee-producing countries in the East. The Dutch Government during late years has been taking wise measures to protect the natives and promote their welfare, and that is the wisest policy it can pursue. The export and import trade of Palembang is almost exclusively in the hands of Chinamen and Arabs. There is not a single European firm. Room enough for reflection, at least!

The following will show readily the quantity and value of coffee exported from Singapore to the United States during the three years end-

ing September 30, 1880 (not losing sight of 20,282 piculs exported during the year ending September 30, 1877), viz:

	Piculs.	Invoiced value.
September 30, 1878	334.82	$7,051 15
September 30, 1879	24,027.88	455,043 08
September 30, 1880	12,712.88	296,300 71
Total	37,075.58	758,395 94

If all the hill-coffee (coffee-arabica) and Liberia coffee that has been planted in various parts of the peninsula by European planters, most particularly in Perak, Sungei-Ujong, and Johore, will turn out fairly the production in another year or two will be considerable. The quality it is generally asserted will be fair or good, as regards the "hill-coffee." I would not as yet venture to express an opinion as to Liberia coffee, of which so much has been planted. It grows luxuriantly, at least, and produces unusually large berries, and there is such an eager demand for them, for seeds, often at exhorbitant prices, that it would not pay to roast them, to even try the quality.

SUGAR.

Sugar cannot be called, with proper justice, an article of export produce here, or in the country adjacent to this port. Occasionally quantities are sent here from more distant places, and most of it is made in a simple primitive manner by Chinese planters. It is good yellow or brown sugar that is shipped to refineries or distilleries in the United States and Europe. But in the province of Wellesley there are a few large sugar estates owned and carried on by English firms with good success. The cane does well there, and the planters are provided with very good machinery for securing the juice and manufacturing it into white or amber-colored sugar of large grain, the most of which goes to London, occasionally some, via Singapore, to the United States, some to China, while the remainder is consumed in the colony, together with Java sugar commanding in the retail trade even higher prices than in our own country.

Sugar-cane thrives hereabouts on any kind of fair soil luxuriantly, and, with a little care, not only on low bottom lands, but also on good uplands, even on hills; and well-attended upland cane contains a higher percentage of saccharine matter than bottom cane. The natives plant it to be eaten raw, cut in joints for this market, where a large quantity is thus consumed. The natives claim that the eating of raw sugar-cane tends to keep them in good health.

There are hundreds upon thousands of acres of the best sugar lands in provinces on the peninsula under British rule—yes, fully as good as in province "Wellesley." But as long as the merchants, bankers, and capitalists of Singapore show so little spirit of enterprise for the development of the vast resources of this colony alone (not to go beyond it) these lands will lie dormant. On the other hand, if the land laws were less exacting, and the colonial government took the matter in hand with more vigor and encouragement, the local capitalists and some of those in Europe (like those in England, who years ago furnished capital for the sugar estates in province Wellesley) might perhaps change the aspect of affairs. If they would create new sugar estates even to half the ex-

tent as in Java or the Philippine Islands, Singapore might export large quantities of sugar. But that is their lookout, not ours, and in the mean time other countries not far from this colony plant sugar largely, and have *all* the products that can be found in this colony. This I mention as a precursor to the handling of the same subject in a different way in a future report.

A. G. STUDER,
Consul.

UNITED STATES CONSULATE,
Singapore, Straits Settlements.

THE CULTIVATION OF THE VINE IN FRANCE AND IN THE UNITED STATES.

REPORT BY CONSUL FRISBIE, OF RHEIMS.

Knowing that the cultivation of the vine and the manufacture of its product is fast becoming an important industry in many parts of the United States, I have considered it of importance for me to make a study of the manner of cultivation usually employed by the great vine growers in the province of Champagne, in the department of the Marne, in the center of which district this consulate is situated, in order to communicate the same to the Department for the benefit of those engaged in like industry in our own country, with the hope that they may find in it something of interest and profit to them.

In my study of this subject, I have taken advantage of such works (which are necessarily few and of a local character) as I could obtain on the subject, and have also availed myself of much information obtained from conversation with leading and experienced cultivators and wine manufacturers.

The cultivation of the vine in the province of Champagne, in the department of the Marne, and particularly in the districts of Rheims and Epernay, is, according to the most reliable authorities, of very ancient date. One writer says: "Strong men, we know, lived before Agamemnon; and strong wine was made in the fair province of Champagne long before the days of the sagacious old monk, Don Peregrim, to whom the world is indebted for the sparkling vintage known under the now familiar name of Champagne."

The red wine of the Champagne sparkled on the boards of the monarchs of the middle ages when they sat at meat amidst their mail-clad chivalry, and quaffed mighty beakers to the confusion of the "Paynim."

There are several groups of low hills situated on the banks of the Marne and the Vesle, possessing a light, shallow soil, and with a previous understratum principally composed of tertiary layers and of chalk, with a mixture of silcia and light clay, combined with a varying proportion of oxide of iron. These groups of hills are beautifully situated for sunshine, and of very little good for the cultivation of other vegetable produce. Such advantages as these seemed to point to a special provision of nature for the cultivation of the vine. Poor, sometimes even barren, soils, so long as they are easily accessible to air and water, are, as every one here will tell you, quite sufficient for its growth.

If the first attempts at cultivation were crowned with success, still it was not, till a comparatively recent date, which we may fix at the last quar-

ter of the preceding century, that this industry sprang into importance. It was, indeed, from this time that Champagne wines, already renowned for their fineness and lightness, began to be the object of new experiments. These resulted in a gradual increase of vine-growing, and to the perfecting of the produce.

Sixteen thousand five hundred hectares (about 40,700 acres) are at the present time devoted, in the department of the Marne, to the cultivation of the vine. In each district the nature and situation of the soil, and more especially the experience of vine growers, partly founded on tradition, have led to the adoption of different kinds of vines and various modes of culture.

Unquestionably the finest grapes are produced in the hilly regions in the neighborhood of Rheims and Vertus. The wines coming from the slopes of these hills have long been celebrated, the first under the name of *river wines*, and the second under the name of *hill wines;* but this distinction has nearly ceased since the appropriation of wines of a certain quality for the manufacture of sparkling champagne.

The most renowned vineyards extend:

1. Along the right bank of the Marne from Mareuil to Damery. Along the line of railway from Paris to Rheims the traveler sees on his left in succession the fertile hills of Damery, Cumières, Hautvillers, Dizy-la-Rivière, and Ay. Further on, as the line curves, those of Mareul, Bouzy, Ambonnay, and Trépail come into view.

2. On the slope which faces the Vesle and the city of Rheims are the not less prosperous ones of Villy, Mailly, Tillery, Verzenay, and Verzy.

3. On the left bank of the Marne, four or five miles from the railroad and the river, lie the celebrated vineyards of Épernay, Pierry, Cuis, Cramant, Le Mesnil, and Avize.

Not far from these vineyards, from which are made the celebrated champagne wines, are others of less pretensions, which produce red table wines of some value. In the districts of Châlons, Vitry, and St. Ménehould only wines of less value are produced, which are seldom used in the manufacture of champagne.

In these different localities the principal kinds of vines grown are: white grapes, *épinette*, or the white *Morillon*, and the large *vert-doné* of Ay; red grapes, the *pineaux*, and among them the small *vert-doné*, distinguished by its compressed, irregular bunches of middling-sized grapes, by its large leaves, somewhat rough on the upper and smooth on the under side, lobed, and but little indented. The *épinette* is a prolific bearer, and its round, transparent berries, which hang in no very compact clusters, are both juicy and sweet. It ripens much earlier than either of the other varieties. The *vert-doné* is robust and productive, but yielding a less generous wine than the *pineau*, the plant *doné* of Ay, and the berries of which are dark and oval, and very thin-skinned and remarkably sweet and juicy.

One variety is the plant *gris*, or *burot*, a somewhat delicate vine, whose fruit has a brownish tinge, and yields a light and perfumed wine. There are several other species of vines of second rank, cultivated in the champagne vineyards, notably the common *meunier*, or *miller*, bearing black grapes, and which derives its name from the circumstance of the young leaves appearing to have been sprinkled with flour. There are also the black and white *gonais*, the *meslier*, a prolific white variety, yielding a wine of fair quality, the black and white *gamais*, the *tourlon*, the *marmot*, and several others.

These second-rate vines produce in abundance the wines which were formerly reserved by the vine growers for their own consumption, but

which are now used by not over-nice speculators to mix with their superior wines. It is but fair to say, however, that these second-rate wines are rapidly disappearing, and vines of the first class taking their place.

On the hills around Rheims and Vertus, the method of low cultivation prevails, whilst tall vines are almost exclusively grown on the hills of Chateau Thierry. These widely different methods are said to be required by the different nature of the soils. Along the course of the Marne the vine grows on a shallow, dry soil, receiving and reflecting nearly the whole of the sun's rays. The mode of culture employed allows of the assimilation of the vines to a sort of trellis-work, the trunks of which are in the ground, while the bearing branches growing up from them extend along the face of the soil just as if they were trained on a wall, only in this case the face of the soil representing the wall. On the hills of St. Thierry, on the contrary, the situation is less favorable, the soil being richer, deeper, and more humid; hence the need of a higher growth and a special mode of cultivation. The vines are almost invariably planted on rising ground, the lower slopes, which usually escape the spring frosts, producing the best wines.

In the champagne country the vine, whether cultivated on the high or low method, becomes productive only as the result of the most minute, incessant care and attention. In the localities where it is almost the only industry, it involves during the whole year a series of operations which employ the greater part of the population. According to the statistics, the hands employed are about equal in number to the hectares of land in cultivation, and an average of one vine-dresser for every 5¾ acres of cultivated land.

The various operations required in cultivating the vine are performed by the owners or vine growers, properly so called, or by laborers employed by them, who are to be hired at wages which vary according to the urgency of the work.

The heads of the great champagne houses are as a rule proprietors, in one or more localities, of extensive vineyards. They possess also a large wine-making establishment, and retain a regular troop of vine-dressers, whom they lodge and employ by the year.

Pruning, tilling, propagating by layers, bedding, hoeing, propping, pruning, and nipping the buds, and making stone-houses, are the principal occupations of these workmen from January to September, when the harvest is made. At this season they conduct the vintage; then, when the wine is made, and the vine props pulled up, they profit by the fine weather at the end of autumn, and in the winter by manuring, digging ditches, charring or sulphating the poles, &c.

For the champagne vine-dresser the year begins directly after St. Vincent's day; that is, at the end of January, or the first half of February. At this date, if the weather be fine, operations are begun by pruning. At Ay and Dizy, all the large vines are pruned on two stems; but middle-sized and small ones on a single stem, preserving one "eye" more. At Avize, Cramant, and Verzenay, they are trained on a single stem, but a much longer one. It is also towards the end of February that the twigs that have been cut off are gathered into bundles, either to be burnt or to be sorted out and kept for slips. In March the first work is done on the vine, when the first digging is done. If it were done earlier, there would be the inconvenience of the soil being too hard; and if later, the danger of losing the young shoots, so tender and so slenderly attached, by want of attention mainly on the part of hired work-people. In this month too the vine is usually rebedded, which is done by surrounding the plant with earth as high as the new shoots of

the year; but in some places this is done by leaving a cutting of the year before out of the ground. This work is done with a hoe, the workman digging a small hole under the stem, which he then lowers by pressing on it with his foot, and then fills up again with fresh soil.

In April these operations are continued; it is also in this month, if the weather be favorable, that the making of layers is begun. In order to do this a ditch is dug, or perhaps was dug the season before, twenty centimeters (about 10 inches) deeper than the roots of the parent stem, and a layer of well mellowed earth taken from the surface soil is placed there; then a horizontal layer of cuttings, prepared for the purpose, is inserted on the parent stem and is covered with fresh soil taken from the bottom of the trench. This method of propagating the vine (the bedded plant being destined to separation from the parent stem) has the advantage of rapidly producing new sources of production, and is in general use in the champagne district. It is also during April that the propping of the vines is commenced, the vines being supported by stakes, usually of oak, and as a close system of plantation is followed, no less than 24,000 stakes are required on every acre of land. These stakes are set up by men and women, and an expert laborer, it is said, will set as many as 5,000 of them in the course of a day.

In May, if the season is early, it is convenient to give the first nipping to those branches which grow too rapidly. About the 25th, where there is no longer any fear of frost, the ground is plowed (or delved) again. This light work, which is needed to get rid of pernicious weeds and vegetation, is performed with a hoe or weeding hook. This is best done in dry weather, and should not be done after rain or heavy morning dew.

Toward the end of May, and especially about the beginning of June, commences the training of the vines. All the branches of the same stock are tied by the same bond to the supports (stakes). It is the custom to cut off the shoots which do not reach the ligature at a leaf above the last grape, and to cut off short those which do not show any sign of fruit. After the vines have been secured to the stakes, and have been carefully hoed around their roots, the tops are broken off at a shoot to prevent them from growing above the regulation height, which is usually from 30 to 33 inches.

The cultivators regard the numerous stakes which support the vines as affording some protection against the dreaded white frosts of spring, but I think there can be placed but little, if any, reliance in such a source of protection. These frosts invariably occur between early dawn and sunrise, and to guard against them some cultivators place heaps of hay, refuse dead leaves, and branches, &c., about six or seven rods apart, taking care to keep them moderately damp to prevent too rapid combustion. When a frost is feared the heaps on the side of the vineyard from whence the wind blows are set on fire and the dense smoke spreads over the vines and is said to produce the same results as an actual cloud, warming the atmosphere and converting the frost into dew. In case there is no wind blowing, all the surrounding heaps are set on fire and the desired effects obtained. There are other methods of protection against frost employed, such as roofing the vines over with a straw matting, about one foot and a half in width, and in rolls of considerable length, &c., but the system of creating a dense, warm smoke, as stated, appears to be most in favor.

Besides the plowing, which a good cultivator is never afraid of repeating too often at this season, it is useful toward the end of June to give the ground a second delving. This second digging over (it is generally finished by the first week of July), it is well to prune the lower "eyes"

which have sprouted since the first operation of the kind, it always being considered desirable and important to prevent so far as possible the growth of superfluous woody matter, which tends to draw nourishment from the growing fruit and injure its development. This is a matter which I believe should more earnestly engage the attention of vine-growers in the United States with profit to themselves and satisfaction of their customers in being able to procure well developed and consequently luscious fruit.

From the 20th of July to the 15th of August the heat is too great to permit of work in the vines, which in fact are now in no need of particular attention except it be a little digging if the weather be rainy. The vine-grower makes use of this time to make his *magazines;* this is the name given in the champagne country to the heaps of fertilizing matters which he collects at the side turnings from the roads or other places as near as possible to the vines, and which fertilizing matters are composed chiefly of a kind of compost formed of the loose friable soil dug out from the sides of the high hills, and of supposed volcanic origin, mixed with animal and vegetable refuse. This is also the time to look after the young plants of the year.

Toward the end of August it is the rule to submit the vines to a severe pruning, so as better to expose the grape to the air and the light, always taking care not to bruise it.

When the harvest is over, usually about the end of October, the stakes are taken up and arranged in vertical piles or horizontal heaps. Then until the bad weather the roads or paths of the vineyard are repaired; old vines are pulled up; the earth is leveled; the materials from the magazines (manure, &c.) are turned out; the trenches for propagating the vines are constructed; and when on the approach of frost the vines cannot be approached, the time is spent in making stakes (props), the earth ends of which are first charred and then soaked in a solution of sulphate of copper.

Such are the principal operations which custom and experience have sanctioned in the true champagne vineyards; that is, in the hilly regions of Rheims and Vertus.

In the vines called St. Thierry, or high vines, the succession of operations is much the same, and the work differs but little from that already described. This method of cultivation, however, necessitates three or four plowings; further, at the early spring pruning, all the fruit-bearing branches of the preceding year are lopped off; then, supposing one had to choose between four branches left by the preceding time of growth, it would in general be best to cut off two and preserve those which were nearest the parent stem, one being pruned with two "eyes" and provides the woody matter, and as for the other, destined to become the fruit-bearing branch, it should be of medium thickness, with well-projecting knots, and with a tendency to grow horizontally. At a later season, the first is fixed vertically to tall stocks six feet high, and the second is bent round, fixed, and becomes the bend.

Both low and high vines undergo at proper times, differing according to locality, manuring and improving operations of various kinds. Whether the vine should be manured, and if so, under what conditions and at what times, is a disputed question amongst the greater number of writers. Thus, Dr. Guyot recommends manuring every three years, and enough manure to be put in each time to last those three years, viz: 3 pounds per vine in the best soils, 6 pounds per vine in medium soils, and 12 pounds per vine in poor soils. On the other hand, M. Violart, of Ay, another eminent authority, recommends the moderate use

of manure for oldish vines, and protests against the mischievous use of manures for young vines: "The fruit which is grown from it is only nourished by the manure that has been put into the soil; it hardly takes any of the nature of the soil. An abnormal vigor is given to the vine, and it is in a way plethorized for several years, and when the juices of the manure are exhausted it begins to grow weak; it is ill, as the vine-dressers say. It is therefore necessary to manure young vines with much moderation, but the older ones will bear more."

One of the most important questions, important both by reason of its presence and its dangerous character, is without doubt that of the diseases of the vine.

Although the phylloxera has not yet made its appearance in the champagne country, still there is no lack of other scourges to the cultivation of the vine. Every year has its records of substantial disasters, more or less local in character. Here, as everywhere else, despite the attention and shrewdness of vine-growers, and notwithstanding the invention of many means of protection, there are some vines, generally those with the lowest situation, which pay a heavy duty to the frosts and mists of spring. Often, also, some districts are robbed of their produce by hail.

Apart from these cosmic disturbances, in some districts where the earth, more likely rich than poor, rests on an impervious understratum, generally of a stony character, there appears, after a luxurious vegetation of several years, the disease which the vine-dressers call *chabot*—the withering and death of the plants, which is due simply to the rolling of their roots, caused by an excess of humidity collected in an unretentive substratum.

But it is especially vegetable and animal parasites that have for a longer or a shorter time back threatened the harvests. Of late years, an infinitesimal mushroom, the *Odium tuckeri* (vine-mildew), has appeared very frequently, not only on trellised vines but even in the vineyards.

Flowers of sulphur is an undoubted antidote; but notwithstanding its efficiency it has not yet been generally adopted by vine-growers. Frequently, too, the leaves of the vine suffer from the incursion of another fungus or asexual plant, *Erineum necator;* but the damage done by it is of small importance.

Animal destroyers belong chiefly to the insect order. Every year the different districts suffer from the devastations of several kinds of *coleopteræ*. In the early spring the shoots suffer from the incisions of the *Culs-crottés* or *Coupe-bourgeons* (*Oliorynchus ligustici, O. raucus*).

Later on the *Gribouri* (a vine grub), or *Ecrivain*—scribe—(*Broimris vitis*), come out and bite the leaves, the buds, and lays its eggs on the stem of the vine. Lastly, in June and July, appears the *Bêche*, grafter, or *Lisette*, vine-fretter (*Rhynchites betuleti*), which rob the plants of their leaves.

Amongst the *lepidopteræ* there are two which are especially obnoxious. The vintage-worm (*Cochylis omphaciella*) breeds twice a year and destroys the fruit both in spring and in autumn. The summer-worm (*Olnophthira pilleriana*) has taken up its abode (as is testified by many old records) for a long time past in two localities especially. It commits its depredations at various intervals of time, but always for several years at a time. Its scene of operations is the locality of the best vines half way up the hill between Ay and Dizy. Its second rendezvous is at Verzenay in the best vineyards, also situated about half way up the slope.

Every year the champagne vines, more or less the victims of these accidents, yield, as a rule, a rather poor crop; in fact, in spite of the careful attention and care of the vine-grower, an acre rarely yields more than three or four measures (6 or 8 hogsheads) of 2 hectoliters, *i. e.*, about 6 or 8 measures to the hectare of prepared wine. To this calculation of yield we must add about two-thirds as much again for secondary wines, known under the names of first "taille" (pruning), second "taille" and "rebêche" (second tilling), with the exception of the first "taille," which is sometimes used in the preparation of sparkling wines. These wines are consumed by the proprietor or his vine-dressers.

At Ay, which may properly be chosen as the center and type of the true production of champagne, unbottled wine is worth in an average year from 600 to 800 francs a measure of 2 hectoliters; and the price is about the same for the not less famous vintages of Cramant and Verzenay. One year with another then the vine-growers receive a sum of about 1,800 francs ($360) per acre, that is, by reckoning the minimum price of 600 francs and the production at three "pieces" per acre; but they have been obliged to spend from 1,000 to 1,200 francs during the year on the vines and in the production of the vine. This result would certainly be most satisfactory if this average figure of production was reached every year, which unfortunately can not be said to be the fact.

The comparatively limited extent of the champagne vines (for although there are in the department of the Marne 16,500 hectares [40,700 acres] of vineyards, the real centers of champagne making only occupy from 600 to 800 hectares), is the principal cause of the high prices which the first crop, good or bad, fetches every year.

Sparkling wine can be made everywhere, but it is only in the champagne country, embracing the beforementioned places, that can be raised the grapes from which is drawn this peerless wine, so prized by many, and which a champagne poet has attempted to immortalize in verse, and which my translation brings out thus:

Upon the lips that drink it,
A sweet perfume doth lie;
Its creamy foam the dreamer cheers,
And tickles like a butterfly,
The nostrils of the drinker.

I have been impressed for several years with the belief that on the southern slope of the foothills of Eastern Tennessee, Southwestern and Southern Virginia, and North Carolina, there exist provisions of nature that eminently fit them for a profitable cultivation of the vine, and I have come to the opinion that those sections, under careful, intelligent cultivation, might be made to equal the best wine-producing countries of the world, and that a sparkling wine of fine quality might be made from the grapes grown there.

JOHN L. FRISBIE,
Consul.

UNITED STATES CONSULATE,
Rheims, France, May 6, 1882.

THE MANUFACTURE OF SPARKLING CHAMPAGNE.

REPORT BY CONSUL FRISBIE, OF RHEIMS, FRANCE.

In my dispatch of the 6th instant [foregoing report], I gave the Department a detailed description of vine culture, as usually employed by the vine growers in the department of the Marne, and promised to

by the technical names of "marques," "barnes," "culs-de-poule,' and "lentilles." All houses, too, take this opportunity of adding alcohol in greater or less proportion, according to the quality of the wine.

The wine merchants find the degree of alcohol by distilling a given quantity of wine, of which they take a third, mix the result of the distillation with some distilled water, weighing with an alcometer, and taking into consideration the degree of temperature.

Champagne wines generally have from 11 to 12 per cent. of alcohol, but in some very good years, such as 1865 and 1874, as much as 14 per cent. If the year should be a poor one, and the degree of alcohol insufficient, it is remedied by adding in a sufficient quantity of spirits of 82° centigrades, made from the best cognac brandies.

The day after these operations have been successfully completed they proceed to the fining, which is done with isinglass, prepared beforehand with a slight admixture of tartaric acid. Every cask of white wine receives a certain proportion of this mixture, and is stirred with a stick before and after mixture. The stirring is done with the object of thoroughly mixing the wine and isinglass. The casks are then hermetically sealed. A small hole is drilled into the top of the cask, and is closed with three straws of rye or wheat, with the heads on, which admits sufficient air to remove all danger in case of fermentation. The wine remains in this state for about a fortnight, and sometimes three weeks.

If this operation is performed at the end of February the wine must be put into as cool a cellar as possible, for if it were placed in a warm situation fermentation would set in and prevent the isinglass from producing its results. In any case the wines, when the fining is over, are cellared, unless they are already in cellar, and are left until the spring fermentation sets in.

Every wine-owner, wishing to bottle his wine, should analyze it to ascertain what proportion of alcohol, sugar, and neutral constituents it contains, for the production of effervescence, which is a very important operation; and the breakage which might arise from an excess of saccharine matter would lead to very serious losses.

To help the formation of effervescence, if the wine has not enough sugar in it, more is given to it by means of a preparation called "liqueur," or sirup, which is nothing but pure wine containing candied sugar in solution, and is composed of 100 kilos of candied sugar to 100 liters of wine. The analysis of the wine having been made beforehand, it is easy to calculate the amount of sirup to be inserted. An almost exact measure can be taken with the help of a vinometer.

At this time much care must be taken in the choice of bottles, to the regularity of shape, to their color, and especially to their superior strength. It is worse than useless to use poor bottles. The bottles are thoroughly rinsed, perfectly dried, and before being filled are carefully inspected, both inside and outside.

When the wine and bottles are ready, the workmen proceed to drawing or bottling, an operation which is effected by means of taps with six, eight, or ten spouts.

The bottles when filled pass into the hands of the corker. The methods of corking most in use are done with a mallet.

When the bottle is corked, the cork must be secured. This third operation is the "wiring," to effect which short pieces of wire are looped in the middle and fitted under the ring at the top of the neck of the bottle, and for which a wiring machine is used.

The bottles are then stored in the wine-vaults, or left in the cellars, as the case may be, where they are stacked with rods and laths. In hot

years fermentation sets in sooner; the sugar is decomposed by the acids in the wine; carbonic acid is set free; alcohol is produced, and a deposit; effervescence takes place, and the weaker bottles break. They are then removed as soon as possible to the vaults, after having been marked on the upper sides, so that they may be placed in the same position as before, the marking being made with white chalk. These are piled in the vaults in stacks, as in the cellars.

Often when this effervescence occurs, the deposit mentioned is of more or less tenacious character. As a rule it presents dark traces, and on the side a thin, white substance which appears to adhere to the bottle, and which sometimes cannot be removed by shaking the bottle.

In the month of July, when the bottling is over, the workmen find employment in hooping, removing the defective hoops, replacing them by new ones, &c. These are the operations included in the word "hooping," and they, with the vintage, lead us to the time of early frost.

At this time some houses bring what they have bottled up again to the upper cellar. This is a good plan, as the cold helps the deposit to dry. Others content themselves with changing their position, removing the leaky and broken bottles, and making new piles of bottles. It is at this time, also, that attention is paid to the *masque*, the name given to the deposit on the side of the bottle, and which must be removed. This deposit is removed by means of a machine which consists of a box, into which are placed two bottles having this deposit in them; by means of a handle a rotary motion is imparted to the bottles, which are further subjected to continual blows from two little hammers. These continued shocks produce a shaking which is sufficient to detach the adhesive deposit. The removal by hand requires much more attention. The workman is supplied with an iron implement, and has to take care to hit only just hard enough to detach the crust. If he were to hit too hard it might give rise to accidents.

When the bottles are entirely cleared of deposit, they are placed neck downwards, either on tables or on racks. The latter have certainly the advantage of taking up less room than rows of tables.

After being kept for some time in this position, the wine should be shaken, so as to make all the deposit fall on the cork. This is an important operation, and great care is taken in the selection of workmen to do it. It is done by very slightly lifting the bottle, and giving it a shake or two in that position. To bring it to a successful issue requires a month or six weeks, or even more, the bottle being moved every day. When the deposit has altogether settled on the cork, the good bottles are placed in stacks, with necks down, at a sharp angle, to await the time when they are again uncorked. The rest are replaced and "worked" a second time on the racks.

The uncorking is also a difficult and delicate operation. It is necessary to remove the cork and wiring with the least possible loss of wine, the bottle being all the time kept neck downward. To do this the workman watches the bubble of air which is in the bottle, and so removes the cork that only the deposit is ejected by the rush of gas. When the froth comes he uses a part of it to wash the neck of the bottle, and then inserts a small cork prepared for the purpose, which prevents too great a loss of gas.

The bottle then passes into the hands of a man who takes out enough wine to admit the necessary amount of sirup. The wine is now very "dry" and would not be drinkable, although some countries, especially England, will have nothing but dry wines. This dryness is corrected by the addition of what is called the "export sirup," which differs from

what is put in at the time of the bottling; it is composed of 150 kilos of candied sugar to 100 liters of wine, and three quarts of alcohol, which is added to increase the strength. As the sugar dissolves, the wine becomes thick, and must be filtered to make the liquid perfectly clear.

The bottles when opened and emptied to a certain depth are taken to the "mixer." The mixing consists in putting into each a certain equal quantity of sirup, the precise proportion differing for each country. When a bottle is not full enough it is filled with a little wine. The bottle is then placed on a revolving table, and as it revolves all the bottles in turn come to the corker.

This second and final corking requires more care than the first. The corks used are of Spanish cork, soft and strong, hard and full, or red corks, according to the country the wine is to be sent to; they are soaked for a few days before in cold water to soften them, and they bear the name of the manufacturing firm branded on the end which enters the bottle.

For the final corking before dispatch, the corking machine is often a mallet machine, but others are also used. The cork is put into the tube, pressed and made to come level with the lower end of the tube, and with a clean sponge the few drops of water which have resulted from the compression of the cork are wiped off, and then the bottle is filled as much as is wanted and is corked, the cork being driven in to a greater or less extent according to the destination of the wine.

The tying up is then proceeded with, oiled string being used, this being prepared for exportation, and which lasts longer in cool vaults. A new stringing machine has been invented which has been of much use. Before the invention of this machine the work of a "stringer" could only be performed for a few hours at a time, it being so hard and tiring, but now a young man from 16 to 18 years of age can easily string bottles all day.

After the string is put on the wire is added; the kind most in use now is galvanized wire. It is at this time that the bottle is often shaken once or twice to mix the "sirup" thoroughly with the wine. Then the bottles are arranged in piles, always on ends, and are left still for a month or two, being examined then to see if the cork is in order, or if it shows marks of leaking.

Then comes the packing. This is done in boxes or hampers. The bottles are in straw, or wrapped up in straw covers, which are manufactured beforehand in different manners; tin or golden leaves; cratings of wax of different colors; leaden covers; labels with the name of the house, &c. The baskets are closed with flexible twigs of willow. Besides these fastenings, some houses use a wire all around the basket; its ends sealed together with a leaden seal, so that if the receiver finds any loss when it is delivered to him, he cannot claim anything from the carrier unless the seal or fastening has been broken. The cases are closed by means of nails. They are bound with wooden or metallic bands, and some are also sealed.

When the time comes to send the wines away, the senders should take care that the wines are in their right positions, *i. e.*, recumbent. When the wine has reached its destination, it should be taken into a cool place and laid down horizontally. It should not be used for a full fortnight, or even for a longer time, as the traveling injures it, and it would be unfair to judge of the wine on immediate arrival.

This, then, is very nearly the succession of operations required for the production of sparkling champagne wines. The consumer abroad little thinks that the bottle, which may cost him much money, in comparison with other wines, is obliged to pass through all these various operations

before it can be brought into circulation. In short, to make a good bottle of champagne, at least two years of constant work and care are necessary.

I shall soon follow this dispatch with another, relating to the wine industry of the department of the Marne, its use, progress, and present status, the necessary information for which I have now nearly completed.

JOHN L. FRISBIE,
Consul.

UNITED STATES CONSULATE,
Rheimis, France, May 11, 1882.

DESTRUCTION OF AMERICAN VINES IN ITALY.

REPORT BY CONSUL CROSBY, OF FLORENCE.

During the years 1877 and 1880, I reported to the Department at various times details concerning the phylloxera and the introduction of American grape vines into Italy, and that the Italian Government had established a depot for the accumulation, transplanting of shoots, and growth of seeds of American vines, and for this purpose the island of Monte-Christo has been selected, where out of 150,000 shoots, planted as an experiment, 100,000 had proved successful.

I regret now to have to inform the Department that at this nursery, only established a little over a year, the phylloxera has made its appearance among these American vines, which were supposed to be strong and healthy enough to resist all attacks, and already 700 of these vines have been found infected. It seems that a few weeks ago the minister of agriculture, sent to the island of Monte-Christo some experts from his department to select from this nursery a large number of vines for the purpose of having them transplanted to another nursery in the island of Pianosa, where the ground had been already prepared for their reception. After the arrival of these men at the nursery at Monte-Christo, while superintending the digging up of these American vines, to their great surprise they found them infected by the phylloxera. This information was immediately communicated to the minister of agriculture, who telegraphed instructions to have the whole nursery of American vines at Monte-Christo destroyed by fire.

The Italian Government has already expended quite a large amount of money in opening these nurseries for American vines, which now they have had to destroy.

With the slow but sure march of this yearly enemy of the vineyard, from the Italian lakes to the Mediterranean, every vignaiuolo felt that should the native wines of Italy succumb to the attack of this insect, the Italian Government was placing itself in a position, with the nurseries of American shoots on hand, to supply the loss of their own vines if necessary by the introduction of these more hardy ones, which were supposed to be able to resist the phylloxera.

The reception of this news has caused the greatest disappointment and concern throughout the wine-producing provinces of Italy.

J. SCHUYLER CROSBY,
Consul.

UNITED STATES CONSULATE,
Florence, May 2, 1882.

FALSIFICATION OF WINES IN FRANCE.

REPORT BY CONSUL RHODES, OF ROUEN.

Supposing the Department would like to be in possession of such information as early as possible, I here respectfully give a brief, and necessarily imperfect account of some methods employed in the falsification of wine.

In France wines are falsified in three ways:

1. By mixture of different kinds of wines.
2. By the addition of foreign substances to the natural or the mixed wine.
3. By manufacture with ingredients not produced by the vine.

The first is the least objectionable; a strong, heavy wine often being mixed with a light one in order to make another wine more palatable than either. This operation, however, becomes reprehensible when the object is, for instance, to make an inferior white wine, by such mixing, pass for a superior wine. The common practice consists in the mixture of several kinds of wines to make what is technically called *cuvées*. The heavy wines of Auvergne, Cher, and Narbonnais are mixed with the light wines of Lower Burgundy, Anjou, and Charentes. A great part of the vin ordinaire, called Bordeaux, is usually manufactured in this way: one-third of the heavy wine of Languedoc, one-third of red of Charentes, and one-third inferior white wine. When it is intended for exportation it receives in addition alcohol and some coloring matter. The liquory wines of Alicante, Malaga, and Madeira are manufactured with remarkable skill at Cette, in the south of France.

The frauds practiced by mixture are difficult to detect, even among experts, on account of the absence of a foreign substance. When the latter is present the attention of the expert is especially directed to the color of the wine, as it always is in the interest of the falsifier to add to the intensity of the color. Red wines contain three principal coloring substances:

1. Aenoline, a coloring matter common to all grapes except the variety called Aramon.
2. Aenocyanine, a blue coloring matter found especially in the dark wines of Spain, Roussillon, and the southern countries.
3. A yellow substance, which tints the white wine and communicates to the red wines the tone of the onion-skin.

The two first coloring substances differ in their composition according to the variety of the vine.

A number of methods are employed to imitate these coloring substances, a few of which are here briefly described: Aniline reds and violets, rosaline salts, a residue from the manufacture of fuchsia and *grenat*, especially the last. These substances are generally incorporated with a glutinous sirup, extract of beets, carmine of cochineal, &c. These dyes are often charged with arsenic. The fuchsia used alone produces too much of a rose color, and is consequently employed with yellow and violet substances. Aniline brown is found in the wines of Burgundy and the brandies of Cognac to give them age and to improve the tint of the wine. China mauve (*althen nigra*) mixed with water gives a dark violet, but it also communicates, after a time, an odor and taste not agreeable. The *baie de sureau* (*Sambucus niger*) is largely used.

This juice, at first a dark chestnut, brightens with fermentation, and under the influence of acids, becomes a bright red. The *baie d'hiéble* (*Sambucus ebulus*) yields a still darker color. These are both slightly purgative, and are used for preparing the well-known tint of *Fismes*, the tone being heightened with tartaric acid and most frequently alum. The extract of beets is occasionally employed and serves to disguise the fuchsia and the cochineal. In all these mixtures containing foreign substances, large portions of water are, naturally, added to increase the quantity, as herein lies the profit.

ALBERT RHODES,
Consul.

UNITED STATES CONSULATE,
Rouen, May 5, 1882.

THE WINE MARKET OF BURGUNDY.

REPORT BY VICE-CONSUL PEIXOTTO, OF LYONS.

A like situation to the present one is said never previously to have existed in the wine trade of Burgundy and neighboring districts. The campaign began with excessive prices which drove purchasers from the market of this vicinity.

Thus the French wine merchant has been able to liquidate but a part of this year's stock, and they have found their market invaded by foreign produce, which came in a very tide upon them, and has remained intact for want of voluntary purchasers. In the midst of all this the negotiant, he who deals directly with the customers, has remained calm and self possessed, certain of one of the two parties, foreign or national wine merchant, giving out at last, and being forced to yield to circumstances. During this time terms have come about, expired, and payment became due; one or two renewments were allowed but that was all, and the moment came when a concession at any price was necessary.

In the Beaujolais the business is very dull indeed; one scarcely sees the mere shadow of a purchaser. The prices have decreased since December from fifteen to twenty per cent. and a great many proprietors of vineyards have decided that selling out is their only chance of meeting the difficulties, seeing that an increase of price is impossible.

The paring or vine trimming is going on at present under favorable conditions. The wood is healthy and permits one to hope for amelioration in the future. The weather is very propitious for all work now under process. The sulphur treatment has been re-established, and if good results are now attained it is to be expected that next year all the proprietors will sulphurate their vineyards. The prices paid at present are from 135 to 140 francs the cuvée, first quality, and the second sort sells at 80 to 85 francs the cuvée, on the spot, place of vintage.

The quality is below that which was at first estimated, because of the comet's advent, and there is serious reasons to believe that another year like this would open the French market to foreign speculators.

GEORGE D. M. PEIXOTTO,
Vice-Consul.

UNITED STATES CONSULATE,
Lyons, March 7, 1882.

WINE ADULTERATION IN FRANCE.

REPORT BY CONSUL TAYLOR, OF MARSEILLES.

The brandy trade is not extensive in this district, and none is exported to the States from this port. I may assert, after a careful examination of the invoice book, that the exports of brandy for the last five years have not amounted to one thousand dollars. The wine trade is more active, but is confined to the grades produced in the south of France and known as "communs" or "ordinary." The inquiries recommended by your instructions will then bear on such grades alone. I am sorry to say that I found it no easy task, although simplified to such an extent. I have had, before this, many an opportunity to realize how reticent Marseilles merchants are about their business, even in its most lawful shape, and I fully anticipated the result of my investigations when bearing upon so delicate a subject. Very little information could be obtained from the merchants, and the chamber of commerce, being consulted, stated that it was impossible to know or even to form an opinion about the extent of wine adulteration.

It must be borne in mind that the French law punishes adulteration of any article of food with a fine of from fifty to five hundred francs, and imprisonment for a term of not less than three months nor more than one year, or two years if the adulteration is proved to be injurious to health. Wine, and especially ordinary red wine, is, to this population, as much of a necessary of life as bread itself, and the poorest laborer must have his bottle of wine at every meal. Hence the necessity of adapting the supply to the demand, and also to keep the prices down within the means of the consuming classes. This necessity, connected with the enticement afforded to unscrupulous merchants by the comparatively high internal taxes set on wine, can leave no doubt that wine is falsified in spite of the law.

The difficulty is in ascertaining in what manner and to what degree such adulterations are made. If the law is unable to restrain the operation, it has the effect to have the various processes kept absolutely secret, and to make it impossible to find any official records of the quantities of falsified wine manufactured either for consumption or exportation.

The report which I now place before you is a condensed statement of all the information that I could obtain from various, and, as far as practicable, disinterested sources.

In good justice to the wine merchants of this place, I am bound to declare that the current opinion, too easily accepted in the United States, and even here, that wines are sold in which any ingredient may be found except the juice of grapes, is groundless. Before the appearance of phylloxera in the French vineyards, the production was too large to make such foul practices necessary, as it greatly exceeded the consumption and kept the pure wine at very low rates; and the remedy to the decrease occasioned by the destroying insect was at first found in the importation of cheap wines from other countries, and soon after, in the manufacture of wine from raisins imported from the east.

This industry, upon which I have already reported, is now thriving, and hundreds of factories certainly produce, now, more wine than the vines here ever did. These raisin wines have been recognized as harm-

less by the French law, and no distinction is made between the raisin and grape wines, both being recorded in the excise book as "Vins" without any other denomination, and making it impossible to ascertain officially what quantity of either is sold, exported, or consumed.

But it is no mystery that the raisin wine, which is always colorless, is disposed of principally by being mixed with the natural wine, which imparts to it its color. When this mixture is made within a reasonable limit, say about 10 per cent., it is perfectly harmless and considered as a lawful process, which helps to furnish the French population with their usual and necessary quantity of wine.

Many, unfortunately, are liable to derive illegitimate profits from the facilities thus offered them in the wide difference of prices between the natural and the raisin wine.

The people are accustomed to the use of red wine, and raisin wine can only be sold as such when colored by artificial means. The French law only authorizes deep colored wine for the purpose, but large quantities of it are required to give a merchantable hue, and there are men who do not hesitate to use more powerful agents, very small quantities of which would produce the desired effect.

There is hardly any substance of that kind that is not employed. I give here a list of those that are known to be of most frequent use, together with the precipitates obtained by the reaction of potash on such wines, according to authors who have made a study of the question:

	Precipitate.
Black elder berries	violet.
Dwarf elder berries	sullied violet.
Privet berries	violet-blue.
Phytolacca berries	yellow.
Huckleberries	bluish-gray.
Wild poppy	gray.
Tincture of turnsol	light violet.
Logwood	purple-red.
Brazil wood	purplish-gray.

Nearly all the above substances are cathartic and more or less injurious to the health, but are not considered to be poisonous as other chemical tinctures which are also sometimes used, such as carmine, sulphate of indigo, and especially the substance called here "fuschine" or aniline red, and against which severe measures have been taken by the French customs, to prevent the importation of any wine thus adulterated. A sample of every cask imported is carefully analyzed before the wine is admitted for consumption, and whenever traces are found of such deleterious substances the wine is without delay poured into the sea.

I have no doubt that many other reprehensible tamperings are practiced on wines, and I have said nothing of the usual and almost necessary manipulations that French wines go through before they are delivered to the consumer. To explain the words "almost necessary," I shall have merely to mention the well-known fact that all wines are subject to numberless stages of alterations or decompositions, "maladies," as the French term it; every wine grower or merchant has his own receipt for preventing or curing these "diseases."

An enumeration of all those that are more generally known would be devoid of real interest, and without the scope of information more particularly desired by the Department, as they are nearly all free from any consequence injurious to the health. I shall only mention two processes in almost universal use, in the South of France at least, viz: The sprinkling of the grape before it is pressed, with plaster, and the fumigation of

the casks, in which the wine is lodged, with sulphur wicks. The abuse of these two modes of proceeding, which are harmless when moderately used, is likely to form, in the former case, certain aluminous salts, and in the latter sulphuric acid.

I have reason to believe also that it is customary to put some alum in wines that are exported, in order to preserve their clearness.

I may also mention that wines of superior grades are commonly made by a judicious mixture of different wines of inferior quality with the addition of certain essences openly sold as "fleur de Bordeaux" and "fleur de Bourgogne," that give to the mixture the flavor of either of these renowned wines. But I will add that the fraud consists there simply of the deception practiced on the innocent consumer who pays high prices for a poor product and that no danger to the health can arise from its use.

To sum up, and with a view to answer as accurately as possible to the questions propounded, I shall close by saying: As the French law prohibits all adulteration of wine, even the addition of water, there is officially no falsified wine either exported or consumed here, and it is consequently impossible to find out what percentage of falsified wine is exported to the United States or elsewhere. Still, no doubt can be entertained as to the adulteration taking place; and wines are analyzed here only when imported and not at all when exported. The only means of detecting the amount of falsified wine shipped from this port to the United States is to follow the example of the French customs, and have all wines arriving at the United States sampled and carefully analyzed before they are delivered to the importer.

But, inasmuch as falsified wine may be sent abroad, even when a fair price is paid for it, I would strongly recommend again that a strict analysis be made of all imported wines.

This protective measure strictly enforced, would at once make known the per centum of falsified wine sent to the States, and the injury that may attend the consumption of such wines.

The port of Cette, in this consular district, being an important wine market, I thought it well to communicate your dispatch to the consular agent at that port, Mr. Nahmens, whose report I have the honor to inclose herewith.

H. A. TAYLOR,
Consul.

UNITED STATES CONSULATE,
Marseilles, May 1, 1882.

[Inclosure in Consul Taylor's report.]

Mr. Nahmens to Consul Taylor

HORACE A. TAYLOR, Esq., *United States Consul, Marseilles:*

DEAR SIR: In reply to your esteemed favor of 11th instant, I, before all, beg to state that the questions you put to me are not only, as you say it yourself, of a very delicate nature, but even very difficult, not to say impossible, to be resolved in any such manner, because nobody likes to divulge his secrets, even if there is no wrong, and of course less yet if there is somewhat to be concealed.

After this, you will conceive that I am not able to appraise, even approximately, the per centum of falsified wine and brandy exported to the United States, but I dare say that if there be really falsification, it takes place certainly in much inferior a proportion than it is probably believed, and I ask myself, what is meant by falsification?

In my opinion there can be no falsified brandy, because whether distilled out of

wine or dry fruits, even potatoes, beets, or other ingredients, it is always alcohol or brandy, of course more or less good, but there is, properly speaking, no falsification nor fraud if not sold as wine-spirit; so much less, as those who ask here for brandy, perhaps with a cognac brand, know very well and understand it even so, that they will receive but an imitation of cognac, more or less well made, as the price is more or less high.

It is another thing with the wine, which ought to be natural, viz, the genuine pure juice of the grapes, while in the latter years many mixtures with currant wines or sugar wines are exported in the lower qualities, particularly imitations of sherry and also in vermouth, but who can ascertain the quantities, when in France the excise administration is assimilating both products?

In these articles also the trade must certainly be aware of adulterations, whenever wines are offered at too low prices, because under 40 francs per 100 liters, packages included, free on board here, which will make about 30 cents a gallon, no natural wine can be shipped.

It is, however, to be considered that, owing to the dreadful and long-lasting stagnation of business, many wines, inferior in quality it is true, but quite natural, are to be had now and then at lower rates, in consequence of which much less artificial wines have been employed of late.

Concerning the second question, relative to the injury to health which may be caused by the consumption of the above-mentioned mixtures, I sincerely think that there is no reason for such apprehension, because, for aught I know, these preparations are got but by fermentation of currants and sugar under water, and if they require a somewhat higher addition of alcohol than the natural wines, much injury cannot result therefrom in a country where, as in the United States, people are accustomed to strong beverages; and, certainly, long before France had recourse to these surrogates, Hamburg and other German ports have shipped such, perhaps of less innocent a nature, without provoking complaints.

I except, however, the artificial coloration of red wines; but it, also, is very little used in this country and severely reprobated by law, while I should not dare say the same of all shipments from Spain and Portugal.

L. S. NAHMENS,
Consular Agent.

UNITED STATES CONSULAR AGENCY,
Cette, April 26, 1882.

EXPERIMENTS IN VINE CULTURE IN FRANCE.

REPORT BY VICE-CONSUL PEIXOTTO, OF LYONS.

It has been recommended that nurseries for the study of American grape vines be established throughout different parts of France, and much has been said against the abuse of foreign vines as a means of combating the phylloxera, for it is understood that several kinds have proved less valuable for this purpose than was expected. In his annual report Mr. Marion gives some interesting information concerning the sulphide of carbon treatment, and some valuable notes are found furnished by Mr. Tholière de l'Ysle, in which he recapitulates the results of his investigation in this matter. He affirms that in 1877 he made mention of experiments with American vines, as in that year the grafting had extended to the Clinton, and these have produced fruit by a new vine-spring this last vintage.

The parts which contained the graft were undergoing the sulphide of carbon treatment, however, as the decay of the clintus since 1877 rendered this necessary.

The Northern Virginia and Cynthiana put to a second test perished again in the second year of growth, and as to the Herbemont and Cunningham, they only prolong existence to end in showing the decay caused by phylloxera. The report made by the superior commission recognizes the above facts as true, and recommends circumspection in

the use of foreign vines in general, as those already tried have proved that they are not only subject to the parasite, but that they are not able to resist it. Mr. Holière de l'Ysle says that he preserved a third of his vineyard by sulphide of carbon, and he most confidently believes that, if in 1877 he had had the courage to undertake the treatment generally he would have been able to preserve at least two-thirds of his vines. Last year he augmented his vineyard by a new surface of 2 hectares and 42 ares, of which only 22 ares are now preserved, and this he says was done through the application of sulphide of carbon, used too late, however, to have a valuable influence. Thus in a short space a new plantation was almost entirely destroyed, only a seventh part being preserved by artificial means. Such is the rapidity of the parasite's increase.

Mr. de l'Ysle says that towards the end of 1879 some proprietors of the Ermitage, witnesses of his efforts, undertook the treatment of their vineyards by sulphide of carbon. In 1880 a syndicate of twelve proprietors, representing about 60 hectares of vineland, engaged to follow a program of defense and reconstruction.

At present this syndicate comprises nineteen members, representing almost the entire extent of fruit-producing vineland, or over 60 hectares, 9 of which are planted with new vines.

The above will show the confidence placed in the sulphide of carbon, for whilst these proprietors have seen fit to plant 9 hectares, or 90,000 square meters, with new vines for experiment, they have devoted 51 hectares, or 450,000 square meters, of their vineyards to the sulphide of carbon treatment.

The development given to this means of defense is a confirmation of the advantageous results attained up to this time being appreciated, and a proof of the hopes to which they have given rise.

GEORGE D. M. PEIXOTTO,
Vice Consul.

UNITED STATES CONSULATE,
Lyons, March 14, 1882.

FIGHTING THE PHYLLOXERA IN EUROPE.

REPORT BY COMMERCIAL AGENT WAMER, OF DUSSELDORF.

The destruction to which the grape crop of France and Germany is subjected on the appearance of the phylloxera in the vineyards has been the cause of much study and investigation by wine producers and scientific men, to find out the most practical and economical means of preventing these pestilential insects from pursuing their course of devastation.

In order to form an idea as to what extent the grape crop of France suffered by the plague of 1881, it is only necessary to refer to a report made to the Department of State by our able consul at Bordeaux. He reports that there were 100,000 hectares of vineyards destroyed in 1881, against 37,000 hectares in 1880.

Of the various remedies recommended for destroying the phylloxera, the results obtained from the use of *bisulphide of carbon and potassium sulpho-carbonate** have been most satisfactory. By comparing the condition of the vines treated respectively with bisulphide of carbon and

*Prepared by treating bisulphide of carbon with caustic potash.

potassium sulpho-carbonate, it was found that in the first case they grew stronger and remained green for a longer period than those under the influence of the latter, or the potassium sulpho-carbonate treatment, but the yield in grapes was not so good.

It appears that the use of bisulphide of carbon in the vineyards of France in 1881 did not have the desired effect which Pastre, from personal observations made, has attributed to the extreme amount of moisture contained in the soil during that season. The same authority, having obtained good results from its use in his vineyards, makes the following suggestions as his experience:

1. Only those vines should be treated whose diseased condition has not been of long standing.

2. The treatment to be continued during the winter only by normal temperatures, and discontinued as soon as the temperature begins to fall too low.

3. The soil must be good and dry.

4. If the vines are in a compact soil and the phylloxera invasion is old, the number of holes in the soil should be increased and only small doses of the bisulphide of carbon administered.

5. The manuring must be strong, and potash salts applied in conjunction with *stable manure.*

6. The condition of the vines must be watched closely, and if, after one or two years, the insects have been entirely destroyed, the treatment is to be discontinued; but if there are a few still remaining unkilled, the bisulphide of carbon should be resumed only in very moderate doses.

As a preventive against the plague, Avignon recommends the use of common tar. Gayon has carried on investigations with the view of finding out such organisms that could live as parasites on the phylloxera, but as yet his efforts have not been very successful. Thurman writes concerning the proposed method of Gouillond Depret in the use of bromine against the phylloxera that, besides its being an expensive one, the injurious effects it produces on the health of the workmen renders it quite dangerous.

With reference to the treatment of phylloxerated vines with *potassium sulpho-carbonate*, P. Mouille, who has had eight years' of experience with its use, makes the following observations:

1. The application of sulpho-carbonate before or in the beginning of the phylloxera invasion will prevent its increase in the vineyards and allow to the vines the power of producing their normal yield of grapes.

2. From its use the destruction of the vines will be lessened and the sickliest ones restored under all climatic influence.

3. *Potassium sulpho-carbonate* is a manure of the first quality.

Mouillefert claims that by the judicious use of sulpho-carbonate it is a complete means of fighting against this terrible enemy to the grape crop.

In conclusion, I would say that the prospects of this year's grape crop in Germany are most favorable, and an abundant crop is predicted. The season thus far has been extraordinarily propitious for all other crops.

WM. D. WAMER,
Commercial Agent.

UNITED STATES COMMERCIAL AGENCY,
Dusseldorf, May 17, 1882.

TARIFF LAWS OF MEXICO.

REPORT ON THE TARIFF LAWS AND RATES OF DUTY OF MEXICO, IN FORCE MARCH 1, 1882.

Translated and arranged by Consul Sutton, of Matamoros.

INTRODUCTORY NOTE.

The following translation is taken from the law of November 8, 1880, which was intended to place all laws and regulations concerning the tariff in one book.

The copies used in translating were those edited by Emiliano Busto, and published by Aguilar and Sons, Mexico, 1880, and that of the Diario Comercial, Vera Cruz, J. Ledesma, 1881.

On November 1 to 15, 1881, the tax on gross weight, which practically abolished the free list, took effect.

To this date no new tariff book containing the changes made by that law has been published, and it was found necessary to go through the book, making the additions in pencil.

These additions are, in each case, those given in columns headed "Duty for each 100 kilograms gross."

To enable any question as to translation or duty to be readily settled by reference to the Mexican original, I have given in the left-hand margin, to the right of the consecutive numbers and in brackets, the numbers of the articles in the Arancel of November 8, 1880.

From necessity the metric system is followed, but the American equivalent is given in a foot note.

In some cases it has been found very difficult to obtain an English equivalent for articles in the Arancel. Where there has seemed to be a doubt the Spanish original has been given in italics.

In other cases several English equivalents of the Spanish original are given.

The important circulars issued since the publication of the Arancel are given in Appendix A.

Other (*aclaraciones*) or explanations have been introduced in the proper alphabetical place.

To enable merchants to understand more fully the forms referred to in the text, these, eleven in number, are given in Appendix B, first the English translation, and afterwards the originals in Spanish.

Following these forms in Appendix B are four brief notes and references to various reports bearing upon this work. A table of contents will be found at the end.

WARNER P. SUTTON,
Consul.

UNITED STATES CONSULATE,
Matamoros, March 22, 1882.

TARIFF LAWS AND RATES OF DUTY OF MEXICO, IN FORCE MARCH 1, 1882.

CHAPTER I.

GENERAL TRAFFIC.

ARTICLE 1. Merchant ships of whatever nation can carry on commerce through the ports of the republic qualified for commerce of the high seas. Equally the nations can carry it on on the frontiers, through the frontier custom-houses.

ART. 2. I. During the time that any nation is at war with the United States or Mexico the franchise referred to in the preceding article will remain suspended in respect to that nation.

II. A special decree will opportunely declare this interdiction.

CHAPTER II.

COMMERCE OF THE HIGH SEAS.

ART. 3. Foreign ships that carry merchandise for the republic can only discharge in those ports qualified for the commerce of the high seas.

ART. 4. In case that any port opened for the commerce of the high seas be occupied by forces or authorities that would not obey the federal government, it would remain closed for foreign commerce, as also for that of the seaport and coasting trade, and no document, proceeding from those found withdrawn from obedience to the government, will be admitted by the seaports or frontier custom-houses, nor will any dispatch be authorized for the same while they do not return to their normal state.

ART. 5. I. Foreign trading vessels and the merchandise that they carry, also their captains, supercargoes, and crews, will be subject to the regulations in this tariff law, to the payment of the duties it fixes, to the penalties it establishes, and to all dispositions that govern at the time of their arrival.

II. Vessels will be considered as having arrived on entering the territorial waters of the republic.

III. The fitters out and captains of foreign vessels destined to load animals and wood in ports of the republic will be permitted to dispatch at ports of coasting trade without touching at those of commerce of the high seas, being in all other respects subject to the preventions of this tariff law.

ART. 6. Foreign merchant vessels shall pay as port duties those of tonnage, pilotage, and light-house, on the following terms:

I. Sail vessels that bring merchan ise, that is not stone coal, shall pay:

A. For every ton's weight they measure, $1. The gauging of vessels for determining their tonnage will be practiced according to the regulations established by the secretary of war.

B. The pilotage duty will be paid into the captaincy of the port, according to the regulations established by the secretary of war.

C. The light-house duty, wherever it may be, shall be $25 for entrance and departure.

II. Steam vessels, even when they come loaded with merchandise, will be excepted from the tonnage duty, but they shall pay:

A. For light-house duty, wherever it may be, when they carry merchandise upon entrance, $100.

B. Upon departure after having discharged, $100.

Steam vessels that come with merchandise destined for one or more ports of the republic shall pay this duty only once, and, paid in the first one where there is a light-house, it will not be required in the others where they go to discharge the remainder of the merchandise which they carry, providing by the respective certificate that accredits the payment, and the custom-house that receives it, taking care to advise officially the other ports to which the vessel is directed.

III. Sail vessels that come with coal only will be exempt from the payment of the tonnage duty and only subject to that of light-house, wherever it may be, and to that of pilotage.

IV. In case that sail vessels bring coal and merchandise, they will only be excepted from the payment of tonnage duty on that part which is occupied by the coal.

V. Sail vessels that come destined for two or more ports of the republic shall pay in the first at which they arrive their entire tonnage duty, the custom-house giving them a certificate so that it may not be demanded in the others.

VI. Vessels, after having discharged the merchandise they may have brought into any port of the republic, and go to load dye-woods or other national productions at one or more Mexican ports shall not pay in this duty of light-house and tonnage provided that they be accredited with having satisfied said duties at the port where they discharged their effects, having to pay only that of pilotage.

ART. 7. Steam vessels or sail vessels dispatched in ballast and coming directly to any port of the republic shall not pay tonnage or light-house duties.

ART. 8. Vessels that come with the sole object of receiving or conducting passengers, mails, metals, dye-woods, or other national products can arrive at all the ports of the republic qualified to the commerce of the high seas without tonnage duties.

ART. 9. Foreign ships can come freely to the ports of the republic to winter, to water, to obtain fresh provisions or to repair damages without the payment of tonnage or any other duties, but subject to the vigilance and inspection that the collectors of the ports believe necessary to exercise and practice upon them.

ART. 10. Vessels of war, whatever be their nationality, are excepted from the payment of all the duties hereinbefore referred to.

ART. 11. National vessels, transacting commerce of the high seas, are subject to the payment of tonnage, light-house, and pilot duties, in the terms that are arranged in the preceding articles.

CHAPTER III.

COASTING TRADE.

ART. 12. I. The coasting trade cannot be carried on by other than national vessels in the ports of Tampico, Tuxpan, Vera Cruz, Goatza, Coalcos, Frontera, Isla del Carmen, Campeche, Progreso, and all intermediate points.

II. Said traffic will be permitted to foreign vessels, sail or steam, in all other ports when national vessels (lighters?) meet them near to a port, and have not a register opened for the same coast points to which the foreign vessels are directed.

III. Foreign steam or sail vessels are permitted to carry coin of gold or silver from one port to another of the republic, receiving from the custom-house the necessary permit, upon which will be noted the date for the presentation of the return permit; showing in the guarantee, which has to be made, that the time having passed for presenting such return permit, the duties will be made effective, corresponding to the amount sent, without further recourse.

IV. Foreign vessels are permitted, after having concluded the discharge of their cargo in the port or ports to which they may have come destined, to be employed in conveying mail or passengers, without admitting more than the equipage of the latter; they can pass from one port to another, which are qualified for foreign commerce or that of coast trade, without paying tonnage duties, having to carry in all cases besides the list of passengers, equipments, provisions, and baggage, the certificates that accredit them with having fulfilled their obligations in the port of departure, which documents they will exhibit to the employés of the custom-house when coming to anchor.

ART. 13. I. National sail or steam vessels, as soon as they complete the discharge of the foreign goods which they bring to any Mexican port, can load in the same port national goods, even when they contain merchandise destined for other ports.

II. National vessels pursuing the coasting trade shall not pay port duties, excepting pilotage when they ask it.

CHAPTER IV.

DIVING AND FISHING.

ART. 14. I. The zone of pearl fishery in the coast waters of Lower California shall be divided into four sections, whose limits are defined in the regulations of this tariff law.

II. Diving for shell and pearls may be done alternately every two years in only one of these sections. The extraction of the young (or growing) shell will not be permitted under any circumstances.

Infractions of this article will incur a fine of from $100 to $500.

III. Fishing in the territorial waters of the republic and the advantages of all maritime products on its coast are free to all vessels that arrive at them, always subject to the preventions regulated by this tariff law.

CHAPTER V.

ABOLITION OF PROHIBITIONS.

ART. 15. I. The importation of all classes of foreign merchandise to the territory of the republic is permitted. Those comprehended in the tariff of article 18 of this tariff law shall pay* one duty only according to the rates that are established in it; those not comprehended in said tariff shall pay* 55 per cent. upon appraised value, in conformity with the provisions of article 21, in consequence of which all prohibition of importing foreign effects into the republic is abolished.

II. For the importation through maritime and frontier custom-houses of caps (used for war purposes) the written authorization of the Secretary of War will be an essential and prior requisite.

In default of said requisite the collectors of customs shall declare the confiscation of said goods, and shall deliver to the local military authority the caps (used for war purposes) that they seize.

III. Those denouncing fraudulent importations of above-mentioned caps shall be recompensed with one-third part of the value of the goods seized, which payment will be verified by the corresponding officer, previously being ordered by the Secretary of War, transmitted through the Secretary of the Treasury.

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* See Appendix B.

CHAPTER VI.

FREE OF DUTIES.

(See appendix to this report showing the latest changes in Mexican tariff).

ART. 16. The following articles are admitted free of duty (except as stated at right-hand margin):

Numbers.		Articles.	Duty on each 100 kilograms gross.
1	[4]	Alabaster, in bulk	$0 50
2	[1]	Armament for the states, when requested of the President by the governors with consent of respective legislatures	Free.
3	[7]	Anchors. (See Masts, No. 46.)	
4	[5]	Animals of all classes, living or prepared for cabinets of natural history, except geldings	50
5	[61]	Anvils (used by silversmiths)	50
6	[66]	Anvils	50
7	[11]	Bars of steel for mines, round or octagonal, from four to six centimeters* in diameter and from 75 to 175 centimeters in length	50
8	[17]	Barrows and trucks of hand of one or two wheels	50
9	[65]	Beams, small, of iron, for roofs always that cannot be made use of for other objects in which iron is employed	50
10	[34]	Books, printed with or without *plain* binding, with the exception of those specified article 18 in this tariff	1 00
11	[36]	Bricks and refractory earth	50
12	[10]	Brimstone. (See Sulphur, No. 88.)	
13	[13]	Cane-knives. (See Hoes, No. 35.)	
14	[19]	Cars. (See Coaches, No. 18.)	
15	[49]	Cabinets of ancient coins and models of all kinds	1 00
16	[41]	Charts. (See Maps, No. 47)	
17	[20]	Coal, of all classes	Free.
18	[19]	Coaches and cars for railway	Free.
19	[37]	Coat of arms. (See Type, No. 37.)	
20	[21]	Collections, mineral, geological and all branches of natural history	75
21	[32]	Corn meal and the hand-mills for making it	50
22	[40]	Corn	50
23	[18]	Crucibles, melting pots of all materials and sizes	50
24	[24]	Designs and models of machines, edifices, monuments, and ships	50
25	[23]	*Destrozos del cachalots* (pieces of whale)	50
26	[51]	Dry feed, straw	50
27	[55]	Dynamite. (See Powder, No. 63.)	
28	[28]	Fruits and vegetables, fresh, with the exception of those specified in this tariff law	50
29	[45]	Fuse. (See Wicks, No. 99.)	
30	[5]	Geldings. (See Animals, No. 4.)	
31	[41]	Globes. (See Maps, No. 47.)	
32	[29]	Guano	50
33	[13]	Harrows. (See Hoes, No. 35.)	
34	[25]	Heading. (See Staves, No. 84.)	
35	[13]	Hoes (heavy), cane-knives, scythes, sickles, harrows, rakes, shovels, pickaxes, spades, hoes, and mattocks for agriculture	50
36	[22]	Houses of wood and iron, complete	50
37	[30]	Ice	50
38	[33]	Instruments, for the sciences	1 00
39	[62]	Ink, printers'	50
40	[3]	Iron or steel wire, for carding, from No. 26 up	50
41	[27]	Iron and steel, wrought, in rails for railways	50
42	[65]	Iron beams. (See Beams, No. 9.)	
43	[53]	Lithographic stones	50
44	[14]	Lime, hydraulic	50
45	[43]	Locomotives. (See Machinery, No. 43.)	
46	[7]	Masts, spars, and anchors for vessels, large or small	50
47	[41]	Maps, geographical, topographical, nautical charts and globes, terrestrial and celestial	1 00
48	[42]	I. Machines and apparatus of all classes for industrial, agricultural, and mining purposes, sciences, and arts, and their separate extra parts and pieces	50
		II. The separate parts of machinery and apparatus that come united or separately are included in this exemption, not comprehending in this the bands of leather or rubber that serve to communicate movement when not imported at the same time with the machinery to which they are adapted.	
		III. The articles that can be made use of separately from the machinery or apparatus, as pig, hoop, nail, bar iron, oils, cloths of wool and other materials, cured or uncured skins, even when they come with the machinery, will be subject to the payment of duties according to this tariff law.	
	[43]	Machines of steam, locomotives, iron or wooden ties, or other utensils for the construction of railways	Free.
50	[44]	Marble, in bulk or in blocks, for pavements, of all dimensions	50
51	[13]	Mattocks. (See Hoes No. 35)	

*Centimeter = .3937 of an inch.

Numbers.		Articles.	Duty on each 100 kilograms gross.
52	[46]	Metals, precious, in bullion or in powder	Free.
53	[24]	Models. (See Designs, No. 24.)	
54	[47]	Molds and patterns for the arts	$0 50
55	[48]	Money, legal, of silver or gold, from all nations	Free.
56	[57]	Oars for small vessels	50
57	[8]	Oats, in grain or straw	50
58	[50]	Objects of natural history for museums and cabinets	50
59	[47]	Patterns. (See Molds, No. 54)	
60	[15]	Pipes. (See Water-pipes, No. 98.)	
61	[13]	Pickaxes. (See Hoes, No. 35.)	
62	[18]	Pots. (See Crucibles, No. 23.)	
63	[55]	Powder, common, for mines, and dynamite for same object	50
64	[52]	I. Plants and seeds for the improvement of agriculture in quantities not exceeding 115 kilograms of each kind of seeds	50
		II. In order that seeds may be comprehended in this exemption, it will be necessary to specify in the respective consular invoices that they are imported for the improvement of agriculture.	
65	[6]	Plows and plowshares	50
66	[12]	Pumps for fire and common pumps of all classes and materials for irrigation and other purposes	50
67	[9]	Quicksilver	50
68	[13]	Rakes. (See Hoes, No. 35)	
69	[64]	Rags or cloth of all kinds for fabrication of paper	50
70	[27]	Rails. (See Iron, No. 41.)	
71	[30]	Refractory earth. (See Bricks, No. 11)	
72	[37]	Rules. (See Type, No. 93.)	
73	[58]	Salt, common, that is introduced through the Paso del Norte	50
74	[59]	Saltpeter	50
75	[13]	Scythes. (See Hoes, No. 35.)	
76	[52]	Seeds. (See Plants, No. 64.)	
77	[13]	Shovels. (See Hoes, No. 35.)	
78	[13]	Sickles. (See Hoes, No. 35.)	
79	[54]	Slates, for roofs and pavements	50
80	[31]	Soda, hyposulphate of	50
81	[37]	Spaces, (See Type, No. 93.)	
82	[13]	Spades. (See Hoes, No. 35.)	
83	[7]	Spars, (See Masts, No. 46.)	
84	[25]	Staves and heading for barrels	50
85	[3]	Steel. (See Iron, No. 40.)	
86	[27]	Steel. (See Iron, No. 41.)	
87	[60]	Sulphate of copper	50
88	[10]	Sulphur, brimstone	50
89	[2]	Telegraph wire, the destination of which will be proven by the parties interested at seaport custom-houses	Free.
90	[16]	Teasels of wire, mounted on bands for machinery or vegetable teasels	50
91	[17]	Trucks. (See Barrows, No. 8.)	
92	[63]	Type, of wood and other utensils for lithography	50
93	[37]	Type, coats of arms, spaces, rules, vignettes, and type for printing of all kinds	50
94	[56]	Vaccine virus	50
95	[28]	Vegetables. (See Fruit, No. 26.)	
96	[37]	Vignettes. (See Type, No. 93.)	
97	[26]	Vessels, of all classes and forms, in their naturalization or sale, or in their introduction to navigate the bays, lakes, canals, or rivers of the republic	50
98	[15]	Water-pipes of all classes, materials, and dimensions, not considering comprehended in this exemption tubes of copper or other metal that do not come soldered or closed with seam or riveting in all their length, which will remain subject to the payment of duties according to their material	50
99	[45]	Wick and fuse for mines	50
100	[2]	Wire. (See Telegraph wire, No. 89.)	
101	[3]	Wire. (See Iron, No. 40.)	
102	[35]	Wood	50
103	[38]	Wood, of box	50
104	[39]	Wood, ordinary, for construction	50
		Sewing-machines with their separate extra parts and pieces	1 00

ART. 17. The executive of the union can dispense with the duties of importation to the sum of $100, on objects introduced into the Federal States for the purpose of favoring the better materials and to the aid of public beneficence.

CHAPTER VII.

DUTIABLE IMPORTS

ART. 18. All foreign merchandise, fruits and effects that are imported in this republic at the qualified ports of commerce (*de altura*) of the high seas, or by its frontier

custom-houses, with the exception of those specified in article 16 of this tariff law, shall pay the duties expressed by the following tariff:

Numbers.	Articles.	Weight, measure, or number.	Per cent. on invoice value.	Specific duty.	Duty on each 100 kilos, gross.
1 [35]	Absinthe, made from cane or other material not specified, and in bottles and demijohns without allowance for breakage or leakage, net weight	kilo		$0 38 08	$0 50
2 [20]	Accordeons and armonicas, gross weight	do		43	75
3 [16]	Acetates, of all classes, net weight; including in this that of the inner package	do		15	50
	Acids:				
4 [18]	Of all substances, gaseous or liquid, net weight; including in this that of the inner package	do		25	50
5 [19]	In crystal or powder, net weight; including in this that of the inner package	do		1 00	75
6 [635]	Adornments, for ladies' shoes, of silk, that are not ornaments of fine metal, upon appraised value		55		1 00
7	Agates. (See Amber, No. 15.)				
8 [42]	Alabaster, and all classes of work of this material with the exception of specified ones, gross weight	kilo		24	50
	Albums:				
9 [55]	Fine, with or without photographs, with coverings of ivory, tortoise-shell, shell, or velvet, with or without clasps and adornments of gold or silver, gross weight	do		1 15	1 00
10 [56]	Ordinary, with or without photographs, gross weight	do		86	75
11 [61]	Alcohol or spirits of wine, in whatever kind of cask or package, without allowance for leakage or breakage, net weight	do		75	50
12 [78]	Almonds, sweet and bitter, without shell, net weight	do		20	1 00
13 [79]	Almonds, with shell	do		10	50
14 [64]	Alphabets and numbers for marking, gross weight	do		29	50
15 [115]	Amber, manufactures of, sea-foam, jet, agate, tortoise-shell, shell, or ivory, not specified, gross weight	do		1 15	1 00
16 [89]	Ambergris, net weight; including in this that of the inner wrapper	do		15	1 00
17 [644]	Ammunition bags, powder horns, and sacks of all classes for hunters, gross weight	do		43	50
18 [93]	Anis. (See Caraway seed, No. 188.)				
19	Anisado. (See Cognac, Nos. 253 and 254.)				
19a [165]	Anvils, square block of iron. (See Anvils in free list.)	do		10	50
20 [99]	Apparatus, of gum-elastic, gutta-percha, silk, and other materials for medicinal and surgical uses, net weight; including in this that of the inner package	do		1 00	1 00
21	Armonicas. (See Accordeons, No. 2.)				
	Arms, fire:				
22 [109]	Breech or muzzle loading, entirely or partially gilded, plated or nickled, or, not being plated, shall have handle of ivory, shell, or, other material, except wood; and their extra pieces; gross weight	do		1 25	1 00
23 [110]	Breech or muzzle loading, black or of a bluish color that have handles of wood; and their extra pieces; gross weight	do		1 00	1 00
24 [111]	Not repeating or breech-loading of whatever classes and adornments, and their extra pieces, gross weight	do		75	75
25	Arrack. (See Rum, Nos. 792 and 793.)				
26 [126]	Atropia (drug), and its salts, net weight; including in this that of the inner wrapper	do		25	1 00
27 [502]	Axes and hatchets, gross weight	do		10	50
28 [395]	Axles and springs for carriages	do		12	50
29 [802]	Bags for hunters. (See Ammunition bags, No. 17.)				
30 [803]	Bags and valises, for traveling, of all classes and sizes, gross weight	do		43	50
31 [349]	Bags or ready-made sacks, ordinary, of all materials, upon appraised value		55		50
32 [349]	Bagging. (See Linen goods, No. 583.)				
33 [260]	Bagging of linen or hemp. (See Linen, No. 583.)				
34 [156]	Baize and plain flannel of wool and other textures analogous to wool	kilo		23	1 00
35 [157]	Baize and twilled flannel of wool and other textures analogous to wool	do		29	1 00
36 [158]	Baize and flannel plain, white, of wool and cotton, and other analogous textures	do		16½	1 00
37 [159]	Baize and plain flannel, colored, of linen and cotton and other analogous materials	do		19	1 00
38 [160]	Baize and flannel twilled, of wool and cotton, and other analogous materials	do		23	1 00

Numbers.	Articles.	Weight, measure, or number.	Per cent. on invoice value.	Specific duty.	Duty on each 100 kilos, gross.
39 [137]	Balances and scales of iron, copper, or brass, and their weights, gross weight	kilo		$0 29	$0 50
40 (137)	Balconies. (See Iron, worked or wrought, No. 533.)				
41 [138]	Ball molds of whatever metal, gross weight	do		29	50
	Balsams:				
42 [139]	Natural, net weight; including in this that of the inner wrapper, and without allowance for leakage and breakage	do		1 00	1 00
43 [140]	Compounded, net weight; including in this that of the inner wrapper, and without allowance for leakage and breakage	do		1 50	1 00
44 [172]	Balls, billiard, of ivory	do		3 72	1 00
	Bands:				
45 [141]	Leather, that do not come attached to any machinery and forming part of it, invoice value		55		
46 [142]	Of rubber, &c		55		
47 [143]	For waist, woolen, plain in texture without embroidery	*sq. m.		23	1 00
48 [144]	Twilled in texture, &c	do		29	1 00
49 [145]	Plain or twilled, embroidered in same material	do		32	1 00
50 [146]	Plain or twilled, embroidered in silk	do		40	1 00
51 [147]	For waist, of crape of silk, even when they have on their edges other material not fine metal, net weight	kilo		9 56	1 00
52 [148]	Of silk, plain or embroidered, even when bordered with some other material not fine metal, net weight	do		14 34	1 00
	Barley:				
53 [295]	Not pearl, net weight	do		03	50
54 [295]	Pearl. (See Seeds, medicinal, No. 881.)				
55 [343]	Bark, medicinal, gross weight	do		20	50
	Baskets, large and small:				
56 [253]	Of cane, bamboo, wood, or wire, gross weight	do		43	75
57 [254]	Not specified, with the exception of those of gold or silver, gross weight	do		1 15	1 00
58 [153]	Batiste, linen. (See Cambric, No. 160.)				
	Beads:				
59 [1]	Glass bugles, polished, cut, or ground, gross weight	do		29	70
60 [2]	Uncut or unground, gross weight	do		19	50
61 [365]	Of glass, according to their class. (See Beads, Nos. 64 and 65.)				
62 [366]	Covered with crape of all kinds and imitation pearls, gross weight	do		1 15	75
63 [367]	Of ordinary size and very small, common metal, gross weight	do		1 15	75
64 [377]	Seed glass, polished, cut, and ground, and imitation of garnet, gross weight	do		29	50
65 [378]	Of glass that are not cut nor ground, and rosaries made of the same, gross weight	do		19	50
66 (720)	Beaver fur of all classes, net weight	do		2 87	1 00
	Beds and cots:				
67 [233]	Of iron, gross weight	do		19	50
68 [234]	Of brass, though having iron parts, gross weight	do		29	50
	Beer and cider:				
69 [304]	In bottles, without allowance for leakage or breakage, net weight	do do		1 20	50
70 [305]	In casks, without allowance for leakage net weight.	do do		½ 10	50
	Bells:				
71 [252]	Large and small, of metal not gold or silver, gross weight	do		29	50
71* [288]	For animals, of iron or brass, gross weight	do		29	50
	Belts or girdles:				
72 [312]	Of all classes not specified, and whose buckles are *not* of silver or gold; gross weight	do		43	75
73 [313]	Of silk, or other material with mixture of silk, with or without buckle *not* of gold or silver, gross weight	do		1 15	1 00
	Bellows:				
74 [475]	Hand, for chimneys, pianos, and other uses, gross weight	do		29	50
75 [476]	For forges, gross weight	do		10	50
76 [632]	Billiard tables, of all materials not including the cloth, upon appraised value		55		50
77 [666]	Bismuth, oxide or sub-nitrate of, gross weight	kilo		1 00	1 00

*1 linear meter equals 39.37 inches.

Numbers.	Articles.	Weight, measure, or number.	Per cent. on invoice value.	Specific duty.	Duty on each 100 kilos, gross.
78 [169]	Bits of iron for beasts. (See bridles, No. 134.)				
79 [170]	Bits, parts of, and wheels (*rodetes*) of iron or brass, gross weight	kilo		$0 29	$0 50
80 [493]	Bitters, net weight, without allowance for breakage	do		25	50
	Blanket-cloaks (*sarapes y tilmas*):				
81 [808]	Of cotton, stamped or striped	Sq. m.*		72	1 00
82 [809]	Of wool, stamped or striped, without flowing sleeves, borders, or works	do		1 00	1 00
	Blankets (*sarapes*):				
83 [810]	Of wool (shaped for the arms to be be free), with borders worked or stamped	do		2 00	1 00
84 [811]	Of wool imitation of those of Saltillo, worked or stamped	do		8 00	1 00
85 [812]	Blanket-cloaks, striped or stamped, of wool and cotton in any proportion that the mixture may be, not having the border worked	do		75	1 00
	Blankets:				
86 [813]	Striped or stamped, of wool and cotton, in whatever proportion the mixture may be	do		1 00	1 00
87 [814]	Imitation of those of Saltillo, worked or stamped, of wool, with mixture of cotton or linen in any proportion	do		6 00	1 00
88 [815]	Imitation of those of Saltillo, worked or stamped, of wool, with mixture of silk in any proportion	do		12 00	1 00
89 [467]	Of wool, plain or stamped	do		48	1 00
90 [468]	Of wool, not worked or stamped	do		96	1 00
91 [469]	Of cotton and wool, plain or stamped, in whatever proportion the mixture may be	do		72	1 00
92 [469]	Blades. (See swords, No. 968.)				
93 [163]	Blacking and polish for shoes, gross weight	kilo		19	50
94 [164]	Blacking of all classes not specified in this tariff, gross weight	do		25	50
	Blinds:				
95 [724]	Window. (See window blinds, No. 1095.)				
96 [863]	Other. (See window blinds, No. 1095.)				
	Blondes and laces:				
97 [168]	Of silk, and their imitations, net weight	do		34 41	1 00
98 [169]	Of silk, with beads, invoice value		55		1 00
99 [53]	Blouses, scarfs, and coverings of woolen yarn, with the exception of those specified in Nos. 1060 and 538 to 540 for adults and children, even though they may have some ornaments of silk, net weight	kilo		1 72	1 00
100 [767]	Bodkins, for sewing of any material not silver or gold, gross weight	do		86	75
	Books:				
101 [557]	Blank or ruled, of all sizes, with ordinary binding, gross weight	do		86	75
102 [558]	Bound with velvet, shell, tortoise-shell, ivory, or metal, gross weight	do		1 15	75
	Boots or half boots:				
103 [176]	Of cow-hide of more than 18 centimeters of sole	doz		16 50	1 00
104 [177]	Of calf-skin or patent leather that exceed 18 centimeters of sole	do		27 00	1 00
105 [856]	Boot-hooks, with or without boxes, gross weight	kilo		43	50
	Bolts:				
106 [710]	For tops of doors, of iron, gross weight	do		19	50
107 [711]	Of brass, gross weight	do		29	50
108 [458]	Bolts. (See Hinges, No. 503 and 504.)				
109 [118]	Bone or whalebone, manufactures of, not specified, gross weight	do		29	50
	Bosoms:				
110 [714]	Cotton of all classes, for shirts	dozen		50	1 00
111 [715]	Plain, of linen, for shirts, of all classes	do		1 50	1 00
112 [716]	Of linen, embroidered, for shirts of all classes	do		2 50	1 00
113 [465]	Bottles or flasks of metal or glass, covered with leather, wicker-work, or gutta-percha, gross weight	kilo		29	50
	Boxes:				
114 [198]	Of iron, for carriages, in which the axles run, gross weight	do		12	50
115 [212]	Of paints for artists, schools, &c., of all kinds, gross weight	do		29	50
116 [213]	For snuff, cigars, cigarettes, matches, &c., of ordinary metal without plating or gilding, of leather, wood, paste-board, horn, gum, or other analogous materials, gross weight	do		57	7

* 1 meter equals 39.37 inches.

Numbers.	Articles.	Weight, measure, or number.	Per cent. on invoice value.	Specific duty.	Duty on each 100 kilos, gross.
117 [214]	Boxes—Continued.				
118 [216]	Of plated or gilded metal, tortoise-shell, shell, ivory, or other analogous materials, gross weight	kilo		$1 15	$1 00
119 [217]	For jewelry, gross weight	do		86	1 00
120 [218]	Same, of all classes, for reactive chemicals, gross weight	do		3 00	1 00
121 [219]	And manufactures of paper and paste-board, with all classes of ornaments except plated or gilded metal, gross weight	do		43	75
122 [859]	Not specified, except those of gold and silver, gross weight	do		1 15	1 00
123 [863]	Braces, suspenders of all kinds, for men, gross weight	do		57	50
124 [863]	Braids:				
125 [306]	Of cotton or linen. (See Tapes, No. 979 and 980.)				
	Of wool. (See Tapes, No. 980.)				
126 [665]	(See Tapes, No. 979.)				
127 [119]	Brass:				
	Leaf, gross weight	do		86	75
128 [551]	Manufactures of copper, zinc, pewter, or white metal, that are not tinned iron or *plaque*, gross weight	do		36	75
129 [552]	In sheets or rolls, gross weight	do		29	50
130 [761]	In rods of more than five millimeters in diameter, gross weight	do		19	50
131 [725]	Breastpins. (See Rings, Nos. 775 and 776.)				
132 [611]	Breast protector, for fencing. (See Gloves, No. 441.)				
133 [542]	Breast pumps and feeding bottles. (See Glass, No. 434.)				
134 [470]	Bricks, fire	M.		2 20	51
135 [303]	Bridles and bits of all classes, for horses, gross weight	kilo		19	50
136 [208]	Bristles for shoemakers, gross weight	do		29	50
	Brushes:				
137 [299]	For shoes, horses, and scrubbing brushes, gross weight	do		19	50
138 [300]	For tables, clothes, hair, teeth, nails, and hats, set in bone, wood, horn, or gutta percha, gross weight	do		29	50
139 [752]	For tables, &c., set in ivory, shell, tortoise-shell, and plated or gilded metal, gross weight	do		86	75
140 [504]	Feather, for dusting, gross weight	do		29	50
	Buckles and clasps:				
141 [505]	Of iron or brass, for harnesses, trimmings, or other articles of saddle and harness-ware, covered or uncovered, that are not plated not gilded, gross weight	do		19	50
142 [506]	Of metal, for all uses, plated or gilded, gross weight	do		1 15	75
143 [1]	Of all classes, for dresses, boots, and shoes, traces, cravats, and other uses, not plated or gilded, gross weight	do		29	50
144 [171]	Bugles. (See Beads, Nos. 59 and 60.)				
145 [769]	Bugles, horns, or trumpets, for coaches, gross weight	do		29	50
146 [190]	Burners, of iron and other materials, for lamps, gross weight	do		29	50
	Busts, according to class. (See Statues, Nos. 931 to 934.)				
147	Busts. (See Statues, No. 931.)				
148 [614]	Butter, net weight: including in this that of the inner wrapper	do		24	50
	Buttons:				
149 [184]	Of iron, of all classes, for clothing, gross weight	do		19	50
150 [185]	Of iron, brass, porcelain, glass, or wood, with or without screws, for boxes, drawers, and doors, gross weight	do		24	50
151 [186]	Plated or gilded, gross weight	do		86	75
152 [187]	Made of silk or only covered, of shell, ivory, jet, or other analogous materials, gross weight	do		86	75
153 [188]	Made or covered with any material other than silk, gross weight	do		29	50
154 [189]	Of white or yellow metal, not plated nor gilded, of glass, porcelain, bone, wood, gutta-percha, and other analogous materials, for clothing, gross weight	do		25	50
	Cacao-beans:				
155 [202]	Of Guayaquil, Para, or the Isles, net weight	do		12	50
156 [203]	Of Carupaño, net weight	do		18	75
157 [204]	Of Maracaibo, Caracas, and any other of fine quality, net weight	do		24	75
158 [536]	Cages, for birds, gross weight	do		29	50
159 [528]	Calicoes. (See Cotton goods, Nos. 284 and 285.)				

Numbers.	Articles.	Weight, measure, or number.	Per cent. on invoice value.	Specific duty.	Duty on each 100 kilos, gross.
160 [235]	Cambric, fine linen lawn	*sq. m.		$0.39	$0 1 00
161 [735]	Camel hair brushes. (See Paint Brushes, No. 671.)				
162 [57]	Camphor, net weight, including in this the weight of the inner wrapper	kilo		50	75
163 [87]	Canary bird seed, gross weight	do		07	50
164 [255]	Candlesticks. (See Chandeliers, Nos. 217 to 220.)				
165 [256]	Candlesticks, of brass, not plated nor gilded, gross weight	do		10	50
166 [54]	Candle-holders, or branches for fixing against a wall, not gilded or plated, gross weight	do		29	
167 [866]	Candlesticks, wooden, with or without frame, for factories, gross weight	do		57	50
	Candles:				
168 [867]	Wax, gross weight	do		70	50
169 [868]	Spermaceti, gross weight	do		57	50
170 [869]	Stearine of any class, gross weight	do		19	50
171 [870]	Paraffine, gross weight	do		38	50
172 [871]	Tallow, gross weight	do		08	50
	Canes:				
173 [152]	Of all kinds, not having gold or silver handle, gross weight	do		86	75
174 [153]	With handles of gold or silver, or of both materials, with or without precious stones, invoice value		13		1 00
175 [162]	Cane, used for furniture, gross weight	do		18	50
176 [199]	Canton crape silk in the piece, net weight	do		9 56	1 00
177 [600]	Canvas. (See Thread, No. 1,000.)				
178 [600]	Canvas or sail cloth, of cotton, all classes	*sq. m.		16	1 00
179 [600]	Canvas, of linen or hemp, according to class. (See Linen, Nos. 583 to 585.)				
180 [58]	Capers, large or small, prepared or in brine, net weight	kilo		10	50
	Caps:				
181 [205]	Of all materials, with or without forepieces, and without ornaments	dozen		3 00	1 00
182 [206]	Of all materials, with or without forepieces, and with ornaments, upon invoice value	do		55	1 00
183 [490]	Of cotton, wool, or linen netting, white or colored, for men and boys	do		2 00	1 00
184 [491]	Of silk netting or other texture, net weight	kilo		9 56	1 00
185 [492]	"Greek," of silk or embroidered or plain or metal, upon appraised value	do		55	1 00
186 [291]	For all kinds of arms, gross weight. (Rifle caps are prohibited except by previous permission)	do		43	50
187 [263]	Capsules, medicinal, of all substances, net weight, including in this that of the inner wrapper	do		1 50	1 00
188 [59]	Caraway seed and anis seed, net weight	do		10	50
189 [66]	Carpets or rugs of hemp or tow	*sq. m.		16	1 00
	Carpets:				
190 [67]	Of coarse frieze, of plain or crossed texture or of beaten wool	do		65	1 00
191 [68]	Brussels, uncut, rough	do		97	1 00
192 [69]	Brussels, or velvet, smooth	do		1 40	1 00
193 [70]	Corded, with cotton warp	do		80	1 00
	Carriages:				
194 [280]	Of two seats and two wheels, with or without cover	each		60 00	50
195 [281]	Open, of two wheels and more than two seats, with or without cover	do		88 00	50
	Carriages and coupes:				
196 [282]	Closed, four wheels and two seats	do		132 00	50
197 [283]	Open, four wheels and more than two seats	do		176 00	50
198 [284]	Carriages, not specified, such as landeaus, berlins, phaetons, and other coaches of four wheels and more than two seats	do		396 00	50
199 [285]	Small, of all classes, for children, upon appraised value		55		50
200 [286]	Two wheels, without covering or lining of any sort, and without being varnished or polished in painting	do		88 00	50
201 [387]	Four wheels, without covering or lining of any sort, and without being varnished or polished in painting	do		176 00	50
202 [274]	Cartridge-shells, for fire-arms, gross weight	kilo		45	50
203 [275]	Cartridges for fire-arms, gross weight	do		50	50
	Carts for oxen and mules and cars:				
204 [277]	Two wheels	each		33 00	50
205 [278]	Four wheels	do		66 00	50

*1 meter is equal to 39.37 inches.

Numbers.	Articles.	Weight, measure, or number.	Per cent. on invoice value.	Specific duty.	Duty on each 100 kilos, gross.
206 [279]	Carts, small hand, two wheels	each		$3 00	$0 50
207 [433]	Cases for scissors and other instruments, and dressing-cases of all classes, with the furnishings and adornments, *not* gilded or plated, gross weight	kilo		86	75
208 [432]	Same, for, &c., that *are* gilded or plated, gross weight	do		1 15	1 00
209 [466]	Cases, for bottles and liquors, of all classes, gross weight	do		1 15	1 00
210 [469]	Cassimeres, heavy or light groundwork and woof, of wool of all colors, with or without mixture of other material	do		1 40	1 00
211	Casters. (See Cruets, Nos. 318 and 319.)				
	Chains:				
212 [162]	For interior of watches. (See Chains No. 215.)				
213 [207]	Of iron, gross weight	kilo		10	50
214 [208]	Of brass, gross weight	do		29	50
215 [209]	Watch chains, of all materials, not silver or gold, gross weight	do		86	75
216 [481]	Chamois skin, of all classes. (See Skins, No. 885.)				
217 [100]	Chandeliers and candlebras of crystal and metal, gilded or plated in whatever proportion, gross weight	do		1 00	1 00
218 [101]	Chandeliers and lamps of crystal and ordinary metal, not gilded or plated, in any proportion, gross weight	do		29	50
	Chandeliers, candlebras, and lamps:				
219 [102]	Of metal, plated or gilded, gross weight	do		1 00	1 00
220 [103]	Of metal, ordinary, *not* plated or gilded, gross weight	do		29	50
221 [770]	Cheese, of all classes, net weight, including in this that of the inner wrapper	do		14	50
222 [41]	Chess, according to class. (See Games of diversion, Nos. 424 and 425.)				
	Chemises:				
223 [241]	Of cotton, for ladies, plain or embroidered	dozen		7 00	1 00
224 [242]	Of cotton, for girls, plain or embroidered	do		3 50	1 00
225 [243]	Of wool netting, underskirts, net weight	kilo		1 60	1 00
226 [249]	Of linen, plain, for ladies	dozen		12 00	1 00
227 [250]	Of linen, embroidered, for ladies	do		24 00	1 00
228 [318]	Chloride of gold, net weight, including in this that of the inner package	kilo		25 00	1 00
229 [382]	Chocolate, of all classes, net weight	do		50	50
230	Cider, in casks. (See Beer, No. 70.)				
231 [820]	Same, in bottles. (See Beer, No. 69.)				
232 [305]	Cigar boxes, according to class. (See Boxes, Nos. 116 and 117.)				
233 [305]	Cigars. (See Tobacco, No. 1022.)				
234 [768]	Cigar cases, according to class. (See Boxes, Nos. 116 and 117.)				
235 [768]	Cigars, fine quality. (See Tobacco, No. 1023.)				
236 [257]	Cinnamon of all kinds, including cassia, net weight	kilo		1 00	75
237	Clasps. (See Hooks, Nos. 512 and 513.)				
238	Cloaks. (See Blankets, Nos. 81 to 82.)				
239 [755]	Cloaks, or talma, for men, of wool, upon appraised value		55		*1 00
	Clocks:				
240 [792]	Fine, for table or wall, not of gold or silver, gross weight	do		86	75
241 [793]	Ordinary, for table or wall, with or without case of wood, gross weight	do		29	50
242 [800]	Clothing, ready-made, of cotton, wool, or linen, not otherwise stated, invoice value		132		1 00
243 [670]	Cloth, of all classes and colors, with warp and woof of wool, plain, worked, corded, or flowered	*sq. m.		1 56	1 00
244 [315]	Cloves, large and small, net weight	kilo		60	75
245 [322]	Coaches. (See Carriages, No. 198.)				
246 [605]	Cocks, of copper, bronze, brass, pelter, zinc, iron, or wood, for emptying barrels or other depositories, gross weight	do		19	50
247 [620]	Cockles. (See Tunny, No. 1040.)				
248 [323]	Codeine, net weight, including in this that of the inner wrapper	do		30	1 00
249 [136]	Cod-fish, dry or smoked, and any other fish prepared in the same manner, net weight	do		10	50
	Coffee:				
250 [210]	Net weight	do		10	50
251 [863]	Roasters, gross weight	do		19	50
252 [323]	Coffers of iron. (See Safes, No. 798.)				

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Numbers.	Articles.	Weight, measure, or number.	Per cent. on invoice value.	Specific value.	Duty on each 100 kilos, gross.
	Cognac, including anisado:				
253 [33]	In bottles or demijohns, without allowance for leakage or breakage, net weight	kilo		$0 38	$0 50
254 [34]	In vessels of wood, without allowance for leakkage, net weight	do		33 8	50
255 [365]	Collars and cuffs, plain or embroidered, of cotton or linen, upon appraised value		55		1 00
256	Colors. (See Paints, No. 674.)				
257 [329]	Columns, of iron, gross weight	do		29	50
	Combs:				
258 [86]	Curry and iron combs, gross weight	do		19	50
259 [717]	Of composition of all classes, gross weight	do		23	50
260 [718]	All sizes, of tortoise shell, ivory, or shell, with or without ornaments, gross weight	do		1 15	75
261 [719]	All sizes, of japanned iron, horn, gutta percha, bone, or wood, with or without ordinary metal, gross weight	do		29	50
262 [394]	Confections and sweetmeats of all kinds, and preserved fruits, including in the weight the boxes or vessels that contain them, net weight	do		1 43	50
263 [322]	Copper in sheets, gross weight	do		33	50
264 [331]	Coral, fine, manufactured or unmanufactured, gross weight	do		3 60	1 00
265 [559]	Cordials, in bottles or earthenware, without allowance for leakage or breakage, gross weight.	do		23 8	50
266 [337]	Cord of wool. (See Tapes, No. 980.)				
267 [338]	Cord of silk, net weight	do		14 34	1 00
268 [336]	Cork in bulk or in plates, net weight	do		6	50
269 [838]	Corks, net weight	do		19	50
270 [858]	Cork-screws, all classes, gross weight	do		43	50
271 [610]	Corn of Guinea or millet, spike or ear of, gross weight	do		2	50
	Corsets of cotton, wool, or linen:				
272 [339]	For girls	doz		2	50
273 [340]	For ladies	do		6 00	1 00
	Cosmetics:				
274 [348]	For maces of billiard tables, gross weight	kilo		25	50
275 [348]	For the hair. (See Perfumery, No. 713.)				
276 [71]	Cotton, waste and soiled cotton thread, to clean machinery, gross weight	do		1	50
	Cotton:				
277 [72]	Unginned, gross weight	do		2	50
278 [73]	Ginned, gross weight	do		7	50
	Cotton goods:				
279 [560]	Coarse or common, white or colored, loosely woven, inferior to muslin, and equal in texture to that known by the name of (*mirriñaque*) manila grass cloth	*sq. m.		9	1 00
280 [561]	White or colored muslin, with the exception of those comprehended in No. 279, not embroidered nor in open work	do		16	1 00
281 [562]	Plain brownish, unbleached	do		9.40	1 00
282 [563]	Plain white, that do not exceed 33 threads in a square of ½ centimeter per side	do		9.35	1 00
283 [564]	Of more than 33 threads, &c	do		16.35	1 00
284 [565]	Plain, dyed, or stamped, that do not exceed 30 threads in a square of ½ centimeter	do		14.30	1 00
285 [566]	Of more than 30 threads, &c	do		16.30	1 00
286 [567]	Twilled, white or brownish, and ginghams	do		16	1 00
287 [568]	White, mottled, or brownish, that are not satin finish, damask-like, plush-like, or velvet-like	do		16	1 00
288 [569]	Cotton goods and textures of cotton, white or colored, embroidered or in open work	do		19	1 00
289 [764]	Cotton net of all classes and colors, net weight; including in this that of the boxes that contain them, and the wrappers around them	kilo		6 00	1 00
290 [291]	Cots, iron. (See Beds, No. 67.)				
291 [291]	Brass. (See Beds, No. 68)				
292 [292]	Camp, of wood, including coverings and mattrasses when attached to the same, gross weight	do		15	50
293 [293]	Of iron, including, &c	do		19	50
294 [294]	Of brass, including, &c	do		29	50
295 [443]	Counters of ivory or shell, gross weight	do		86	75
296 [444]	Counters and dice, for games, of pasteboard, bone, brass, or wood, gross weight	do		29	50
297 [326]	Counterpanes. (See Coverlets, Nos. 302 to 304.)				
298 [368]	Coupes, closed. (See Carriages, Nos. 196 and 197.)				

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Numbers.	Articles.	Weight, measure, or number.	Per cent. on invoice value.	Specific duty.	Duty on each 100 kilos, gross.
299 [846]	Court-plaster. (See Plaster, No. 739.)				
300 [349]	Covers of silk for parasols. (See Linings, No. 589.)				
301 [837]	Covers or screens of woven wire for viands, gross weight	kilo		$0 29	$0 50
302 [319]	Coverlets and counterpanes:				
	Of cotton, and other textures analogous to cotton	*sq. m.		74	1 00
303 [320]	Of wool, &c	do		1 52	1 00
304 [321]	Of wool and cotton, &c., analogous to wool and cotton	do		1 14	1 00
305 [820]	Coverlets of silk. (See Table covers, No. 974.)				
306 [258]	Crabs (shell-fish). (See Tunny, No. 1040.)				
307 [481]	Crackers, all classes, gross weight	kilo		12	50
	Cravats:				
308 [332]	Of cotton	doz		25	1 00
309 [333]	Of linen	do		50	1 00
310 [334]	Of wool	do		50	1 00
311 [335]	Of silk, of all classes, with or without springs and frames, net weight	kilo		18 00	1 00
	Crinolines of all classes:				
312 [350]	For girls	doz		1 50	50
313 [351]	For ladies	do		4 50	50
	Crockery and porcelain:				
314 [601]	Manufactured in pieces of all forms, classes, and sizes; with the exception of those quoted, and *not* including toys of No. 1030; without allowance for breakage, gross weight	kilo		14	50
315 [602]	In pieces of all forms, classes, and sizes, with mountings or ornaments of ordinary metal, white or yellow, without allowance for breakage, gross weight	do		29	50
316 [603]	In pieces, &c., or ornaments of metals plated or gilded, without allowance for breakage, gross weight	do		1 15	50
317 [355]	Crosses and medals of ordinary metal, that is not plated or gilded, gross weight	do		29	50
318 [11]	Cruets of wood or ordinary metal, with or without bottles, gross weight	do		29	75
319 [12]	Cruets of plated or gilded metal, with or without bottles, gross weight	do		1 00	1 00
320	Cruet stands. (See Cruets, Nos. 318 and 319.)				
	Crystal and glass:				
321 [352]	Manufactured in pieces of all forms, classes, and sizes, with the exception of those quoted, without allowance for breakage, gross weight	do		17	50
322 [353]	And sizes, with mountings and ornaments of ordinary metal, white or yellow, without allowance for breakage, gross weight	do		29	50
323 [354]	Ornaments of metal, plated, or gilded, without, &c	do		1 15	50
	Crystals:				
324 [875]	For watches, gross weight	do		24	50
325 [876]	Loose for eye-glasses, gross weight	do		29	50
326	Cuffs. (See Collars, No. 255.)				
327 [767]	Of cotton. (See Collars, No. 255.)				
328 [330]	Cummin seed, net weight	do		7	50
329 [865]	Cups of leather. (See Washbowls, No. 1069.)				
330 [716]	Curry-combs, iron. (See Combs, No. 258.)				
	Curtains:				
331 [344]	Of cotton-muslin, plain or embroidered, upon appraised value		55		1 00
332 [345]	Of cotton-net, plain or embroidered, net weight	do		6	50
333 [346]	Of linen, plain or embroidered, upon appraised value		55		1 00
334 [325]	Cushions and inner linings for carriages, upon appraised value		55		50
335 [385]	Damask of wool. (See Woolen goods, No. 1117.)				
336 [385]	Demijohns of all sizes, without allowance for breakage, gross weight	do		4	50
337 [389]	Diamonds, mounted, for cutting glass, gross weight	do		57	75
338 [383]	Dice for games. (See Counters, No. 296.)				
339 [390]	Digitaline (alkaloid), net weight, including in this that of the inner wrapper	do		25 00	1 00
340 [391]	Diligences (carriages, see also Carriages), all classes and dimensions	each		150 00	50

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Numbers.	Articles.	Weight, measure, or number.	Per cent. on invoice value.	Specific duty.	Duty on each 100 kilos, gross.
341 [392]	Documents of all classes, printed, ruled, and engraved or lithographed, with or without spaces for writing in	each		$57 00	$0 75
342 [392]	Dominoes. (See Games, Nos. 414 and 425.)				
	Drawers, of cotton cloth:				
343 [226]	For adults	doz		4 00	1 00
344 [227]	For children	do		2 00	1 00
	Drawers, under:				
345 [228]	Of cotton netting, net weight	kilo		1 50	1 00
346 [229]	Of woolen netting, net weight	do		1 60	1 00
	Drawers, of linen:				
347 [230]	For adults	doz		6 00	1 00
348 [231]	For children	do		3 00	1 00
349 [232]	Drawers, of silk netting, net weight	kilo		14 34	1 00
350 [385]	Draughts, games of. (See Games, Nos. 424 and 425.)				
351 [651]	Dressing-cases. (See Cases, Nos. 207 and 208.)				
352 [393]	Drugs, medicinal, natural, and chemical products, and the various goods sold in a drug-store that are employed in medicine and in the arts and the vessels, and every class of utensils for medicine or pharmacy that are not specified in the nomenclature of this tariff; upon the invoice value		88		$0 50
353 [609]	Dyewoods, in blocks or in paper, gross weight	kilo		05	50
354	Edging of tapes. (See Tapes, No. 979.)				
355 [795]	Elastics of rubber and cotton for shoes and other uses, gross weight	do		57	50
356 [796]	Elastics, &c., and silk for, &c	do		1 25	75
357 [396]	Elaterium (chemical substance), net weight; including in this that of the inner package	do		30 00	1 00
358 [397]	Elixirs, medicinal, of all substances and kinds, net weight, including in this that of the vessel containing them	do		1 00	50
359 [174]	Embroidery of all kinds entirely of cotton or linen, invoice value		55		1 00
	Embroidery:				
360 [500]	Of wool, net weight	kilo		2 86	1 00
361 [501]	Of silk, net weight	do		8 60	1 00
362 [409]	Emery, in powder, gross weight	do		07	50
363 [408]	Enamel, in leaves or cut in small pieces, gross weight	do		86	75
364 [493]	Engravings. (See Prints, No. 760.)				
365 [772]	Erasers, for slates, gross weight	do		07	50
366 [406]	Essences of sarsaparilla, of Bristol, Townsend, or any other manufacture, net weight; including in this that of the inner package	do		75	50
367 [406]	Essences and extracts for the toilet. (See Perfumery, No. 713.)				
368 [434]	Ether, of all substances, net weight; including in this that of the inner wrapper	do		20	50
369 [436]	Extract of meat, upon appraised value		55		50
370 [437]	Extract of logwood, net weight; including in this that of the inner wrapper	kilo		10	50
371 [437]	Extracts, aromatic, for toilet. (See Perfumery, No. 713.)				
372 [438]	Extracts of all substances for medicinal uses, net weight; including in this that of the inner wrapper	do		3 00	1 00
373 [96]	Eye-glasses, with or without spectacle mountings, Nos. 6 and 8, in common cases, gross weight	do		29	50
374 [290]	Eyelets and sockets, white and yellow, of common metal, for tailors and shoemakers, gross weight	do		29	50
375 [657]	Fancy work, all kinds, on cards or perforated paper, gross weight	do		57	50
	Fans:				
376 [3]	Ordinary, of straw, pasteboard, or linen, without sticks, gross weight	do		19	50
377 [4]	Common, with sticks of wood, horn, or bone, and all that are not specified, gross weight	do		86	75
378 [5]	With sticks of shell, ivory, or tortoise-shell, with or without adornments, loose in box	each		2 25	1 00
379 [26]	Fasteners of iron and brass for doors, windows, &c., gross weight	kilo		19	50
380	Faucets. (See Cocks, No. 246.)				
381 [445]	Felt, of wool, in rolls, net weight	do		20	50
382 [446]	Felts, for frames of hats, gross weight	do		1 90	75
	Fire grates, foot stoves, bake ovens, and cooking stoves:				
383 [380]	With outfits, with ornaments of brass, gross weight	do		29	50
384 [381]	Without ornaments of brass, gross weight	do		19	50
385 [461]	Fire-places of iron, for blacksmiths. (See Fire-grates, Nos. 383 and 384.)				

Numbers.	Articles.	Weight, measure, or number.	Per cent. on invoice value.	Specific duty.	Duty on each 100 kilos, gross.
386 [725]	Fish, preserved, except those included in No. 1040, net weight; including in this the inner wrapper	kilo		$0 72	$0 50
387 [725]	Fish and cockles of any class, pickled, salted, or seasoned with salt or in oil, including sardines in tomato, butter, or oil. (See Tunny, No. 1040.)				
388 [725]	Fish, dried or smoked. (See Codfish, No. 249.)				
389 [97]	Fish-hooks, all classes and sizes, gross weight	do		58	50
390 [258]	Fixtures for coach-poles. (See Rings, No. 774.)				
391 [464]	Flannel, according to its class. (See Baize, Nos. 34 to 38.)				
392	Flasks. (See Bottles, No. 113.)				
393 [407]	Flint and steel, for pocket use, gross weight	do		43	50
394 [503]	Flour, of wheat, of all classes, net weight	do		10	50
395 [459]	Flowers: Artificial and plumes for ornaments, net weight; including the weight of the boxes that contain them	do		2 86	1 00
396 [460]	Medicinal, gross weight	do		20	50
397 [461]	Foils, with or without hilt, gross weight	do		43	50
398	Forks. (See Spoons, Nos. 913 to 917, and Knives, Nos. 551 to 553.)				
399 [414]	Forms, for invoices, drafts, &c. (See Documents.)				
400 [112]	Frames of glazed linen for bonnets and hats for ladies and children, gross weight	do		19	50
401 [415]	Frames for parasols, shades, and umbrellas, gross weight	do		60	75
402 [618]	Frames and moldings of wood, gilded or not, gross weight	do		43	50
403 [454]	Fringes and trimmings: Of cotton, not including fringe, white or colored, net weight; including in the weight that of the pasteboard-box that contains them, and in case they come loose the card on which they are wrapped	do		2 00	1 00
404 [455]	Of wool, with or without beads, net weight	do		2 86	1 00
405 [456]	Of silk, without ornaments, net weight	do		14 34	1 00
406 [457]	With ornaments that are not of fine metal, upon appraised value		55		1 00
	Fruits:				
407 [471]	Dried, net weight	kilo		05	50
408 [472]	In their own juice, net weight; including in the weight that of the vessel containing them	do		50	50
409 [473]	In brandy, wine, or liquor, net weight; including in the weight that of the vessels that contains them	do		72	50
410 [474]	Medicinal, gross weight	do		20	50
411 [476]	Fulminants. (See Caps, No. 186.)				
412	Fur. (See Hair, No. 470.)				
413 [640]	Furniture, of all classes and materials with exception of that quoted in this tariff, upon appraised value		55		50
	Gaiters:				
414 [178]	Of leather, of all classes, with or without elastic, that exceed 18 centimeters of sole	doz		13 00	1 00
415 [179]	Of leather or other material than silk, with or without ornaments or elastic, for ladies, that exceed 18 centimeters of sole	do		13 00	1 00
416 [179]	Of wool. (See Blouses, No. 99.)				
417 [180]	Of silk, with or without adornments or elastic, for ladies, that exceed 18 centimeters of sole	do		17 00	1 00
418 [181]	Of leather or any other material except silk, with or without ornaments or elastic, that do not exceed 18 centimeters of sole	do		7 00	1 00
419 [182]	Of silk, with or without ornaments and elastics, that do not exceed 18 centimeters of sole	do		10 00	1 00
	Galloon and textures of white or yellow metal:				
420 [477]	Not gilded or plated, gross weight	kilo		1 19	1 00
421 [478]	Gilded or plated, in any proportion, gross weight	do		2 38	1 00
422 [479]	Galloon and textures of silver of one or two shades, with or without alloy of other metal, net weight	do		12 00	1 00
423 [480]	Galloon and textures of gilded silver of one or two shades, with or without alloy of other metal, net weight	do		14 00	1 00
	Games of diversion, as lottery, chess, dominoes, draughts, and others:				
424 [538]	Of diversion, of pasteboard, bone, or wood and their boards	do		29	50
425 [539]	Of ivory or shell and their boards, gross weight	do		86	75
426 [493]	Garnet, imitation of. (See Beads, No. 64.)				
	Garters:				
427 [535]	Of cotton, with clasps or buckles, including in the weight the pasteboards that contain them, net weight	do		57	1 00

Numbers.	Articles.	Weight, measure, or number.	Per cent on invoice value.	Specific duty.	Duty on each 100 kilos. gross.
	Garters—Continued.				
428 [596]	Of linen or hemp, of all classes, with clasps or buckles, gross weight	kilo		$0 57	$1 00
429 [597]	Of silk, with or without adornments, net weight	do		14 34	1 00
430 [201]	Geldings	ech		36 00	1 00
	Gin:				
431 [27]	In earthen jars, bottles, demijohns, without allowance for breakage or leakage, net weight.	kilo		48 10	50
432 [28]	In casks, without allowance for leakage, net weight.	do		38 8	50
433	Ginghams. (See Cotton goods, No. 286.)				
	Glass:				
434 [280]	Cut in any shape, as pendants for lamps, chandeliers, and candle-holders, as well as for breast pumps, gross weight	kilo		29	50
435 [260]	Ornaments, cut for embroidery with wire, according to class. (See Wire, curled, Nos. 105 to 107.				
436 [350]	(See Eyeglasses, No. 373.)				
437 [367]	Glasses for counting thread in cloth. (See Lenses, No. 578.)				
438 [873]	Glass, wrought, according to class. (See Crystal, Nos. 321 to 323.)				
439 [874]	Glass, window, of all classes and colors, without allowance for breakage, gross weight	do		24	50
	Gloves:				
440 [494]	Of cotton, wool or linen, of all sizes and colors, prs.	doz		1 00	1 00
441 [495]	Breastplates and leggings for fencing, prs	do		3 00	1 00
442 [496]	Of skin or fur of all classes, including embroidered ones, prs	do		1 50	1 00
	Glove stretchers:				
443 [90]	Of wood or gutta percha, gross weight	kilo		20	50
444 [91]	Of ivory or other material not specified, gross weight	do		60	75
445 [326]	Glue, gross weight	do		29	50
	Gold, beaten:				
446 [663]	Gross weight	do		43	50
447 [664]	Fine, in leaves, up to 11 centimeters in each	M l'vs		4 00	1 00
448 [582]	Goods and textures whose base is of cotton, and that have a mixture of silk in whatever proportion in flowers, stripes, figures, or designs, even having in small quantity a mixture of metal not gold or silver	sq. m.*		20	1 00
449 [583]	Same, of cotton and linen, &c	do		22	1 00
450 [584]	Same, of cotton and wool, &c	do		25	1 00
451 [585]	Same, of cotton, linen, and wool, &c	do		27	1 00
452 [586]	Same, of linen, &c	sq. m.*		25	1 00
453 [587]	Goods and fabrics whose base is of linen and wool, and that have a mixture of silk in whatever proportion in flowers, stripes, figures, or designs, even when they have in small quantity a mixture of metal not gold or silver	do		30	1 00
454 [588]	Same, of wool, &c	do		35	1 00
455 [589]	Same, of silk, with a mixture of cotton, wool, or linen, or these united, plain, twilled, worked, open-worked, shaggy and embroidered, even, &c.; upon appraised value		55		1 00
456 [590]	Same, of silk or cotton, or of both materials, with a mixture of fine metal in any proportion or quantity; upon appraised value		55		1 00
457 [591]	Same, that are composed of various materials that are *not* of silk or metal, and whose mixture has not a special quotation in this tariff, shall pay the rate which will result as a prudent medium of those assigned to the fabrics of the component materials according to their respective classification when the mixture extends to the entire texture, this having only a few threads of diverse material, in which case they shall pay the duty assigned upon the material which composes the greater part of the texture				1 00
458 [592]	Goods and fabrics, plain white, of wool and cotton, as baize and flannel and other analogous textures	sq. m.*		16. 50	1 00
459 [593]	Same, plain of colors of, &c	do		19	1 00
460 [694]	Same, twilled of, &c	do		23	1 00
461 [633]	Grass cloth. (See Cotton goods, No. 279.)				
462 [634]	Grindstones. (See Stones for grinding, No. 948.)				
463 [501]	Gutta-percha. (See Wood, &c., No. 1111.)				
464 [488]	Gum, liquid for desks, net weight; including the bottles that contain it	kilo		29	50

†1 meter equals 39.37 inches.

Numbers.	Articles.	Weight, measure, or number.	Per cent. on invoice value.	Specific duty.	Duty on each 100 kilos, gross.
465 [489]	Gums, resins, and bitumens of all classes not specified, gross weight	kilo		$0 25	$0 50
466 [405]	Guns, escopetas, according to class. (See Arms, Nos. 22 to 24.)				
467 [476]	Guns, fusiles, according to class. (See Arms, Nos. 22 to 24.)				
468 [886]	Gypsum, gross weight	do		19	50
469 [773]	Hackles, not applicable for agriculture, gross weight	do		10	50
470 [721]	Hair, or fur of the vicugna hare, rabbit, or others similar, for hats, net weight	do		1 43	1 00
471 [722]	Hair, for wigs, head dresses, &c., net weight	do		10 00	1 00
472 [524]	Hair-pins. (See Pins, No. 728.)				
	Half hose:				
473 [220]	For adults	doz		1 00	1 00
474 [221]	For children	do		66	1 00
475 [222]	Of wool, for adults	do		1 06	1 00
476 [223]	Of wool, for children	do		77	1 00
477 [224]	Of linen, or hemp for adults	do		1 00	1 00
478 [225]	For children	do		66	1 00
479 [532]	Ham, smoked and salted, and sausages, large and small, net weight	kilo		24	50
480 [77]	Hammers, of iron, large size, for foundries, gross weight	do		06	50
	Handkerchiefs:				
481 [676]	Cotton, plain, white, or colored, with or without borders or hems in the texture, up to 30 threads of warp and woof in a square that has ¼ centimeter per side	sq. m.		14	1 00
482 [677]	Cotton, twilled, white or colored, with or without borders or hems in the texture	do		16	1 00
483 [678]	Cotton, white or colored, with or, &c., of more than 30 threads of warp, &c	do		16	1 00
484 [679]	Cotton, embroidered and open worked, with or without trimmings of lace up to 50 centimeters in a square	do		2 00	1 00
485 [680]	Linen, plain, white or stamped and striped in colors in the texture, with or without hem or border, up to 30 threads of web and woof in a square of ¼ centimeter per side	do		16	1 00
486 [681]	Same, of more than 30 threads of, &c	do		22	1 00
487 [682]	Same, that have a mixture of linen and cotton, shall pay a prudent medium between the rates shown to the handkerchiefs of each one of these materials, according to what is provided in No. 457, of this tariff	do			1 00
488 [683]	Linen embroidered, open worked, or with trimming of lace	doz		4 50	1 00
489 [684]	Silk, plain, striped or twilled, white or colored, even when their border is of another material, net weight	kilo		7 17	1 00
490 [685]	Of silk, worked, embroidered, transparent, or of gauze of all colors, with or without fringe, even when their borders have other materials, net weight	do		10 75	1 00
491 [612]	Handles or helves of wood for tools of artisans, gross weight	do		19	50
492 [768]	Handles and ferrules that are not of gold or silver, gross weight	do		86	75
	Harness, for carriages:				
493 [497]	Common, gross weight	do		86	75
494 [498]	Fine, gross weight	do		2 00	75
495 [506]	Hatchets. (See Axes, No. 27,)				
	Hats:				
496 [822]	Of straw, without trimmings, patterns of, of all classes except those of Panama	doz		6 60	50
497 [823]	Of Panama, with or without trimmings	do		15 00	50
498 [821]	Of felt, patterns of, without furnishing	do		9 00	50
499 [825]	Of all classes and materials and classes, with trimmings of any kind, for boys and men, with the exception of those specified, upon appraised value		55		50
500 [716]	Head-dresses, according to their class. (See Ornaments for the head, Nos. 24 and 25.)				
501 [261]	Hemp, in crude state for making thread or rope, net weight	kilo		06	50
502 [885]	Herbs, medicinal, gross weight	do		20	50
503 [452]	Hinges and bolts of iron, gross weight	do		19	50
503 [161]	Hinges of iron, gross weight	do		19	50

Numbers.	Articles.	Weight, measure, or number.	Per cent on invoice value.	Specific duty.	Duty on each 100 kilos, gross.
504 [453]	Hinges and bolts of brass, gross weight	kilo		$0 29	$0 50
504a [167]	Hinges of brass, gross weight	do		29	50
	Holders for pen or pencil:				
505 [259]	Of gilded or plated metal, ivory, shell, tortoise-shell, or other analogous material, gross weight	do		1 15	1 00
506 [260]	Of metal not plated or gilded, of wood, horn, bone, gutta-percha, or other analogous material, gross weight	do		29	50
507 [634]	Honey. (See Molasses, No. 619.)				
	Hooks:				
508 [60]	Of iron, for hanging pictures, gross weight	kilo		19	50
509 [62]	Of iron, for fastening doors and windows, gross weight	do		19	50
510 [63]	Of brass, for &c.	do		29	50
511 [191]	Hooks and eyes of wire of all classes, loose or fixed, gross weight	do		29	50
	Hooks and clasps:				
512 [192]	Of all kinds, for cloaks, that are not gilded or plated, gross weight	do		43	75
513 [193]	Gilded or plated, or of shell, for cloaks, gross weight	do		86	75
	Hooks:				
514 [482]	Of iron, gross weight	do		19	50
515 [483]	Of brass, gross weight	do		29	50
516 [113]	Hoops covered for crinolines, gross weight	do		12	50
517 [604]	Hops, net weight	do		18	50
518 [754]	Horn, powder. (See Ammunition, No. 17).				
518*	Hose. (See Half-hose, Nos. 473 to 478).				
519 [98]	Indigo, of all kinds, gross weight	do		1 25	1 00
	Ink, for writing:				
520 [852]	In covering of clay, glass, or crystal, net weight	do		29	50
521 [853]	In covering of wood, without allowance for leakage, net weight	do		19	50
	Inkstands:				
522 [854]	Of metal, gilded or plated, gross weight	do		1 15	75
523 [855]	Of all materials, not gilded or plated, gross weight	do		29	50
524 [528]	Instruments for artisans. (See Tools, No. 1026.)				
525 [888]	Iodide, of all substances, gross weight	do		3 00	75
526 [887]	Iodine (metallic), gross weight	do		2 00	50
	Iron:				
527 [117]	Manufactures of, tinned-iron, steel and tin not specified, gross weight	do		24	50
528 [384]	Pieces of, that are partly made with machinery, of many forms, and are used in flouring mills, &c., gross weight	do		06	50
529 [446]	Tinned. (See Iron, manufactures of, No. 527.)				
530 [447]	Grooved, for roofs, gross weight	do		03	50
531 [448]	Of all qualities, in bulk, round bars, and pieces not wrought, as well as pieces of heavy iron used in flouring and other mills. (See No. 528)	do		06	50
532 [449]	In pigs, gross weight	do		00½	50
533 [450]	Wrought, for plow-shares, balconies, or blinds and windows, gross weight	do		29	50
534 [451]	Rolled, beaten, prepared for hoops, nails, and other purposes, gross weight	do		10	50
535 [667]	Oxide of, gross weight	do		50	75
	Ivory:				
536 [619]	In bulk and in sheets, gross weight	do		10	50
537	(See Amber, No. 15.)				
	Jackets:				
538 [374]	Of cotton, white or colored, plain or shaggy	dozen		8 00	1 00
539 [375]	Wool netting, for men	do		12 00	1 00
540 [376]	Wool netting, for boys	do		6 00	1 00
541	Jet. (See Amber, No. 15).				
542 [75]	Jewels of gold or silver, or of both materials, with or without pearls or precious stones, and eye-glasses, mounted in gold or silver; upon invoice value		13		1 00
543 [535]	Jugs, jars, or pitchers of alabaster. (See Alabaster, No. 8.)				
544 [535]	Same, of marble. (See Marble, No. 599.)				
	Keys:				
545 [378]	(See Plates, No. 741.)				
546 [606]	Of watches of all sizes that are not of silver or gold, gross weight	kilo		57	50
547 [607]	Of iron, brass, copper, or plaque, for coaches, gross weight	do		29	50
548 [840]	For piano, gross weight	do		29	50
549 [201]	Kidskins. (See Skins, No. 855.)				
550	Kirsch-wasser. (See Rum, Nos. 792 and 793).				

Numbers.	Articles.	Weight, measure, or number.	Per. cent. on invoice value.	Specific duty.	Duty on each 100 kilos, gross.
	Knives and forks:				
551 [363]	With handle of shell, or plated, or gilded metal, gross weight	kilo		$1 15	$0 75
552 [363]	With ivory handles, gross weight	do		86	75
553 [364]	With wood, bone, horn or iron handles, gross weight	do		19	50
554 [647]	Knives, common, used by porters for unpacking goods, gross weight	do		19	50
	Knives and penknives:				
555 [650]	With shell, ivory, tortoise-shell, or gilded, or plated metal handles, gross weight	do		1 15	75
556 [651]	With iron, bone, wood, or horn handles, gross weight	do		19	50
557 [611]	Lace, bed, white or colored, of cotton or wool, including in the weight that of the pasteboard boxes which contain them, and, in case of coming loose, the board or card on which they are wrapped, net weight	do		1 43	1 00
	Laces:				
558 [402]	Of cotton, including in the weight the boxes in which they come, and the cards on which they are wrapped, net weight	do		6 00	1 00
559 [403]	Of linen, including in the weight the boxes that contain them and the cards on which they are wrapped, net weight	do		8 50	1 00
560 [403]	Of silk. (See Blondes, Nos. 97 and 98).				
561	Lamps. (See Chandeliers, Nos. 218 to 221).				
	Lamps and lanterns:				
562 [440]	Of tin and iron, gross weight	do		19	50
563 [441]	Of brass and copper, gross weight	do		29	50
564 [546]	Lamps (*hydroplatinicas*), gross weight	do		29	50
565 [458]	Lancets, for bleeding animals, gross weight	do		43	50
566 [162]	Landau. (See Carriages, No. 198).				
	Lanterns:				
567 [439]	For coaches, gross weight	do		29	50
568 [599]	According to class. (See Lamps, Nos. 562 and 563.)				
569 [613]	Lard of pork, net weight; including in this that of the inner package	do		18	50
570 [728]	Latch-keys, all classes, gross weight	do		29	50
571 [76]	Lavender, gross weight	do		05	50
572 [545]	Lead, sheets of, gross weight	do		06	50
573 [749]	Lead, in bulk and pigs, gross weight	do		06	50
574 [116]	Leather, manufactures of, not specified, gross weight	do		86	75
575 [524]	Leaves, of medicinal plants, gross weight	do		20	50
576 [732]	Leggings, for fencing. (See Gloves, No. 441.)				
577 [555]	Lenses, ordinary, magnifying, of one glass, in boxes of pasteboard, known as Nos. 1, 2, and 3, gross weight	do		29	50
578 [556]	Lenses and counting-glasses, not mounted in silver or gold, gross weight	do		1 15	1 00
579 [584]	Linen (see Goods):				
580 [599]	In its crude, unwoven, and unbleached state, gross weight	do		07	50
581 [657]	Fine. (See Cambric, No. 160.)				
582 [765]	Net of, net weight, including in the weight that of the wrappers in which they come and the boxes that contain them	do		8 50	1 00
583 [574]	Linen goods and textures of hemp, tow, or of hemp-tow or herb-tow, plain, white, crude, brownish, or of colors up to 8 threads of web, warp and woof in a square of one-half centimeter	sq. m*		11	1 00
584 [575]	Same, of more than 8 and up to 12 threads of, &c	do		12	1 00
585 [576]	Same, of more than 12 and up to 30 threads of, &c	do		16	1 00
	NOTE.—When in the examination of goods comprehended in this number there are found in some parts of the same piece 31 or 32 threads, and in other parts 30 or less, showing in a majority of the examinations the 30 threads manifested, or a less number, they will be quoted with the terms of this number.				
586 [577]	Linen goods and textures, of hemp, hemp-tow, or herb-tow, plain, white, or colored, of more than 30 threads of web and woof in a square of one-half centimeter, with the exception of cambric or batiste	do		22	1 00
587 [579]	Linen, or hemp goods or textures, bleached, unbleached, or colored, embroidered or open worked	do		34	1 00
588 [578]	Same, white, crude, or colored, worked serge-like, damask-like or plush-like	do		22	1 00
589 [462]	Linings of silk, sewed and in patterns, for umbrellas, shades, and parasols, net weight	kilo		14 34	1 00

* 1 meter equals 39.37 inches.

Numbers.	Articles.	Weight, measure, or number.	Per cent. on invoice value.	Specific duty.	Duty on each 100 kilos. gross.
590 [463]	Linings and foundations for hats, of whatever material, net weight	kilo		$1 25	$1 00
591 [36]	Liquors: Spirituous, made from cane or other material, not specified in vessels of wood without allowance for leakage, net weight	do		33 / 44	50
592 [560]	Sweet. (See Cordials, No. 265.)				
593 [305]	Locks. (See Plates, No. 741.)				
594 [600]	Lotteries. (See Games, Nos. 424 and 425.)				
595 [623]	Mallets of iron. (See Sledge hammers, No. 892.)				
596 [438]	Mantles: Head covering, of linen, cotton, or wool. (See Caps, No. 183.)				
597 [615]	(Mantillas) of silk blonde, including the box in which they come, even when such is of fine qualities	each		35 20	1 00
598 [621]	Marble: Manufactured, in blocks, polished or unpolished, for furniture, gross weight	kilo		38	50
599 [622]	Manufactured, in jars, and in all other class of works except those specified, gross weight	do		48	50
600 [264]	Masks: Of wire, or face-covers	each		40	75
601 [265]	All kinds, except of wire	do		20	50
602 [266]	Fencing	do		50	75
603 [464]	Matches, of wood or wax, and igniting cotton cord, or pasteboard, net weight	kilo		1 14	1 00
604 [426]	Mats: Of hemp or cocoa, gross weight	do		12	50
605 [427]	From China, gross weight	do		25	50
606 [327]	Mattresses and pillows of all classes and materials; upon appraised value		55		50
607 [631]	Measures of length and capacity, all classes and materials, gross weight	kilo		29	50
608 [267]	Meats: Preserved of all classes, in juice or dry (not including extract of meat), net weight; including in this the weight of the inner wrapper	do		72	50
609 [268]	Smoked or salted, net weight	do		24	50
610 [626]	Medals. (See Crosses, No. 317.)				
611 [183]	Medicine chests, with bottles empty or filled, gross weight	do		40	50
612 [121]	Metal: Gilded, manufactures of, not specified, gross weight	do		1 15	1 00
613 [543]	Sheets of composition, for vessels, gross weight	do		14	50
614 [544]	Plates or sheets of, excepting those specified, gross weight	do		29	50
615 [262]	Tops for corks of bottles, gross weight	do		29	50
616 [634]	Mills for grinding coffee and paints, gross weight	do		19	50
617 [410]	Mirrors, with or without frames, having more than 30 centimeters on one of its sides, even when the others are less, without allowance for breakage, gross weight	do		43	50
618 [411]	Same, up to 30 centimeters on *each* side, without, &c	do		19	50
619 [633]	Molasses and honey, gross weight	do		07	50
620 [633]	Molding of wood. (See Frames, No. 462.)				
621 [836]	Morocco leather. (See Skins, No. 885.)				
622 [630]	Morphine and its salts, net weight; including in this the weight of the inner package	do		10 00	1 00
623 [82]	Mortars: Of composition, porcelain, marble, or porphyry, gross weight	do		12	50
624 [83]	Of iron, gross weight	do		10	50
625 [84]	Of brass or copper, gross weight	do		19	50
626 [865]	Glass, for pharmacy. (See Drugs, No. 352.)				
627 [637]	Mosaic work: Of stone, for pavements, gross weight	do		05	50
628 [638]	Of wood, for, &c	do		10	50
629 [529]	Musical instruments of all classes, not specified, gross weight	do		43	50
*629 [211]	Music boxes, gross weight	do		43	75
630 [85]	Musk, net weight, including in this the weight of the inner wrapper	do		10	1 00
631 [639]	Mustard, in powder, or prepared in sauce, gross weight	do		46	50
632 [316]	Nails and tacks: Of copper, zinc, brass, or iron, with glass, brass, or porcelain head, gross weight	do		29	50
633 [317]	Of iron of all sizes, gross weight	do		12	50
634 [762]	Of all sizes. (See Nails, Nos. 632 and 633.)				

Numbers.	Articles.	Weight, measure, or number.	Per cent. on invoice value.	Specific duty.	Duty on each 100 kilos, gross.
635	Naphtha. (See Turpentine, No. 1641.)				
636 [329]	Necklaces of metal. (See Rings, Nos. 775 and 776.)				
	Needles:				
637 [30]	From No. zero to five zeros, for sewing, crochet, book-binding, netting, canvas, and others not exceeding 5 centimeters in length, gross weight	kilo		$0 43	$0 50
638 [40]	Packing, of all sizes, gross weight	do		29	50
639 [41]	Sewing, up to 5 centimeters, gross weight	do		86	75
639	Nickel-plated metal, manufactures of, gross weight	do		65	75
640 [620]	Night lights, all kinds, gross weight	do		29	50
641 [736]	Nippers, for sugar, that are not of gold or silver, gross weight	do		57	50
642 [652]	Nitrate of silver, net weight; including in this the weight of the inner wrapper	do		10 00	1 00
643 [654]	Numbers for marking, gross weight	do		29	50
644 [799]	Nut-crackers, not gilded or plated, gross weight	do		43	50
	Oil:				
645 [6]	Olive, in jugs or tin cans, without allowance for leakage or breakage, net weight	do		14	50
646 [7]	Olive, in bottles or vessels of glass, without, &c	do		19	50
647 [8]	Whale, net weight, including in this that of the inner covering	do		10	50
648 [9]	Fixed, excepting olive, elsewhere quoted, net weight, including in this the weight of the inner wrapper	do		50	50
649 [10]	Volatile or essentials, of all substances except those quoted, net weight; including in this the weight of the inner package	do		4 00	1 00
650 [10]	Perfumed. (See Perfumery, No. 713.)				
651 [10]	Coal. (See Petroleum, No. 715.)				
652 [404]	Oil-cloths and oil skins for tables and floors, net weight	do		29	50
653 [524]	Oil skins. (See Oil-cloths, No. 652.)				
654 [864]	Ointments, medicinal. (See Pomades, medicinal, No. 748.)				
	Olives:				
655 [13]	In brine or pickle, net weight	do		09	50
656 [14]	Prepared or in oil, net weight; including the weight of the bottles that contain them	do		10	50
657 [658]	Omnibuses, of all classes and dimensions	ech		200 00	50
658 [296]	Onions, fresh, gross weight	kilo		02	50
659 [658]	Opiates for the teeth. (See Perfumery, No. 713.)				
660 [659]	Opium, gross weight	do		2 00	1 00
	Ornaments:				
661 [21]	Of brass, stamped or hollow, gross weight	do		29	50
662 [22]	Of iron, brass, copper, or plaque, for coaches, gross weight	do		29	50
663 [23]	Of straw, not specified, net weight	do		43	75
664 [24]	For the head and headdress, not of silk, upon appraised value		55		1 00
665 [25]	Same, of silk, though they may have mixture of other materials, net weight; including in this that of the boxes that contain them	kilo		10 00	1 00
666 [662]	Same, for sacred vestments of all classes and materials, upon appraised value		55		1 00
	Organs:				
667 [660]	Chamber, portable for band, gross weight	kilo		43	50
668 [661]	All classes, gross weight	do		43	50
669 [524]	Ovens, of iron. (See Fire grates, Nos. 383 and 384.)				
670 [255]	Padlocks, of iron or brass, and their loose keys, gross weight	do		29	50
671 [190]	Paint brushes and camel hair brushes of all classes and for all uses, gross weight	do		29	50
672 [424]	Paintings. (See Prints, No. 760.)				
673 [735]	Paintings. (See Prints, No. 760.)				
674 [328]	Paints and colors, prepared, net weight; including in this that of the inner wrapper	do		15	50
675 [124]	Paper or pasteboard, manufactures of, gross weight	do		43	75
	Paper:				
676 [687]	Straw, gross weight	do		07	50
677 [688]	Marbled, glossed and colored for book-binders, gross weight	do		17	50
678 [689]	Silk, white or colored, gross weight	do		19	50
679 [690]	For stamping crockery, gross weight	do		17	50
680 [691]	For impressions, sized on one side or not, gross weight	do		10	50
681 [692]	Very and moderately white and fine, ruled or not, including that used for cigarettes, gross weight	do		29	50
682 [693]	White or colored for accounts and letters, ruled or not, and with or without gilt edges, gross weight	do		43	50

Numbers.	Articles.	Weight, measure, or number.	Per cent. on invoice value.	Specific duty.	Duty on each 100 kilos, gross.
	Paper:				
683 [694]	Large, Bristol paper, white or colored	kilo		$0 43	$0 50
684 [695]	For walls, gilt, silvered, or velvet like, gross weight	do		14	50
685 [696]	For walls, &c., colored, common, gross weight	do		10	50
686 [697]	Albuminized, of all colors, gross weight	do		43	50
687 [698]	Engraved or lithographed, for envelopes and tickets, gross weight	do		43	50
688 [699]	Gilded or silvered surface, for ornaments, gross weight	do		20	50
689 [700]	Music, ruled, gross weight	do		24	50
690 [701]	Blotting and copying, for press, gross weight	do		13	50
691 [702]	Oil, for copying books, gross weight	do		07	50
692 [703]	Porcelain, gross weight	do		43	50
693 [704]	Lead, gross weight	do		07	50
694 [705]	Sand, gross weight	do		05	50
695 [705]	For making playing cards. (See Pasteboard, No. 698.)				
696 [770]	Parasols. (See Umbrellas, Nos. 1042 to 1045.)				
697 [272]	Pasteboard, all thicknesses, beaten or not, including bristol board and glazed board and others similar, excepting what is used for making cards (playing), gross weight	do		17	50
698 [273]	Pasteboard and paper for making cards, upon appraised value	do		55	50
699 [712]	Pastes, mineral, for razor-strops. (See Razor-strops, No. 769 *a*.)				
700 [713]	Pastes and lozenges, medicinal, of all substances, net weight, including in this that of the inner wrapper	do		20	50
701 [713]	Pastes for refreshing and beautifying the skin. (See Perfumery, No. 713.)				
702 [276]	Patterns of pasteboard for cards and other uses, gross weight	do		43	50
703 [724]	Pearls, imitation of. (See Beads, No. 62.)				
704 [314]	Pegs and nails for interior of pianos, gross weight	do		29	50
705 [549]	Pencil-cases not of silver, gross weight	do		57	50
706 [550]	Pencils, lead, of all classes, gross weight	do		19	50
707 [761]	Pen-holders, all classes not silver or gold (see No. 506), gross weight	do		29	50
708 [340]	Penknives, according to class. (See Knives, Nos. 555 and 556.)				
709 [751]	Pens, of any metal not silver or gold, gross weight	do		86	75
710 [734]	Pepper, fine and ordinary, net weight	do		23	75
711 [735]	Peppers, large, in oil or powder, net weight, including the weight of vessels that contain them	do		48	50
712 [723]	Pepsine, gross weight	do		5 00	1 00
713 [724]	Perfumery, pomades, cosmetics, and perfumed oil for the hair; powder and opiates for the teeth; powders and pastes for refreshing and beautifying the skin; essences and extracts for the toilet, gross weight	do		86	75
714	Petroleum, crude. (See Turpentine, No. 1041.)				
715 [726]	Petroleum and coal oil, without allowance for leakage, net weight	do		09	50
716	Pewter. (See Solder, Nos. 905 and 906.)				
717 [438]	Phætons. (See Carriages, No. 198.)				
718	Photographs. (See Prints, No. 760.)				
719 [464]	Photographs of all sizes. (See Prints, No. 760.)				
	Pianos:				
720 [617]	Inside works of, ready for mounting. (See Pianos, No. 721.)				
721 [727]	All classes; also the works put up ready for mounting in case, gross weight	do		43	75
722 [724]	Iron or thin plates of iron or brass for the construction of, gross weight	do		19	50
723 [405]	Pickles, in vinegar and sauces, net weight, including weight of the vessels that contain them	do		48	50
724 [732]	Pieces, separate, of swords. (See Swords, No. 968.)				
725 [732]	Pieces, separate, of syringes. (See Syringes, No. 969.)				
726 [85]	Pillows. (See Mattresses, No. 606.)				
727 [733]	Pills of all substances and manufactures, net weight, including in this that of the inner wrapper	do		60	50
728 [65]	Pins and hair-pins, common, gross weight	do		29	50
729 [453]	Pins, large, according to class. (See Rings, Nos. 775 and 776.)				
	Pipes:				
730 [737]	Smoking, with ornaments of gold or silver, gross weight	do		1 15	75
731 [738]	Of wood or gypsum, gross weight	do		25	50
732 [739]	Not having ornaments of gold or silver and not being of wood or gypsum, gross weight	do		57	

Numbers.	Articles.	Weight, measure, or number.	Per cent. on invoice value.	Specific duty.	Duty on each 100 kilos, gross.
733 [739]	Pistols, according to class. (See Arms, Nos. 722 to 724.) 724.)				
734 [38]	Pitch. (See Tar, No. 987.)				
	Plaids:				
735 [741]	Of cassimere of wool	sq. m		$1 40	$1 00
736 [742]	Not cassimere of wool	do		57	1 00
737 [122]	Plaques, or plated metal, not specified, gross weight	kilo		86	75
738 [445]	Plaque and German silver in sheets, gross weight	do		29	50
739 [836]	Plasters and court plaster, gross weight	do		75	50
740 [837]	Plasters, vesicating, gross weight	do		1 00	50
741 [371]	Plates and locks of iron or brass and their keys, loose, gross weight	do		29	50
742 [646]	Playing cards, all classes	gross		12 00	50
743 [751]	Plumes for adornment. (See Flowers, No. 395.)				
744 [763]	Points for pencil cases, gross weight	kilo		57	75
745 [835]	Points or tips for billiard cues, gross weight	do		43	50
746 [378]	Polish for shoes. (See Blacking, No. 93.)				
747 [750]	Pomades. (See Perfumery, No. 713.)				
748 [757]	Pomades and ointments, medicinal, all substances and manufactures, gross weight	do		70	50
749 [758]	Porcelain. (See Crockery, Nos. 314 to 316.)				
	Portemonnaies:				
750 [759]	Of leather, with or without bronze, not gilded or plated, gross weight	do		57	50
751 [760]	Of ivory, tortoise-shell, and shell with or without frame of metal not of silver or gold, gross weight	do		86	50
752 [686]	Potatoes, gross weight	do		03	50
	Powder:				
753 [754]	Gun, for hunters, gross weight	do		1 00	75
754 [755]	For bronzing, gross weight	do		1 15	75
	Powders:				
755 [755]	Tooth. (See Perfumery, 713.)				
756 [755]	For refreshing and beautifying the skin. (See Perfumery, No. 713.)				
757 [756]	Medicinal, of all substances and manufactures, net weight, including in this the weight of the inner package	do		30	50
758 [470]	Preserved fruits. (See Confections, No. 262.)				
759 [762]	Presses of iron for copying letters, gross weight	do		19	50
760 [418]	Prints, paintings, engravings, and photographs of all sizes with or without frames, gross weight	do		57	75
761 [484]	Pulleys, wheel-works, and pulleys of iron, gross weight	do		19	50
762 [485]	Same, of brass, &c	do		29	50
763 [173]	Purses of all classes, even such as are of silk, for money, with tassels and rings, loose or fixed or loose and not of gold or silver, gross weight	do		86	75
764 [750]	Quills, writing	M		2 20	50
765 [826]	Quinine, sulphate of, net weight, including in this the weight of the inner package	kilo		03	1 00
766 [701]	Railing for balconies and windows. (See Iron, wrought, No. 533.)				
767 [771]	Rappee. (See Snuff, No. 899.)				
768 [648]	Razors, with handles of horn, bone or wood, with or without cases, gross weight	do		29	50
769 [649]	Razors, with handles of ivory, shell, tortoise shell, with or without cases, gross weight	do		86	75
769a [125]	Razor-strops, all kinds, for razors, and paste for same, gross weight	do		43	75
770 [349]	Reps, of wool. (See Woolen goods, No. 1116.)				
771 [794]	Reps, of wool, fine. (See Woolen goods, No. 1117.)				
772 [794]	Resins. (See Gums, No. 465.)				
773 [114]	Rice, gross weight	do		07	50
774 [43]	Rings and fixtures for poles of coaches, gross weight	do		19	50
775 [92]	Rings, finger and ear, breast-pins, necklaces, large pins of ordinary metal, that is, without gilding, plating, or false stones, gross weight	do		36	75
776 [93]	Same, of metal, gilded or plated, with or without false stones, gross weight	do		1 15	1 00
	Rings:				
777 [103]	Of metal. (See Rings, Nos. 775 and 776.)				
778 [104]	For harnesses, key-rings, &c., of iron or steel, gross weight	do		19	50
779 [105]	For curtains, &c., of brass, gross weight	do		29	50
780 [106]	With screws, gross weight	do		29	50
781 [106]	For money purses. (See Purses, No. 763.)				
782 [324]	Rockets and fire-crackers, Chinese, gross weight	do		62	50

Numbers.	Articles.	Weight, measure, or number.	Per cent. on invoice value.	Specific duty.	Duty on each 100 kilos, gross.
783 [771]	Roots, medicinal, gross weight	kilo		$0 20	$0 50
784 [337]	Rope, all kinds, of cotton, linen, or hemp, net weight	do		2 00	1 00
785 [800]	Rosaries. (See Beads, No. 65.)				
	Rubber:				
786 [487]	For erasing, gross weight	do		20	50
787 [525]	In blocks and pieces, except such as comes with machinery, gross weight	do		10	50
788 [526]	In pieces, for billiard tables and sheeting, gross weight	do		43	50
789 [527]	Shoes and boots, all forms and sizes, gross weight	do		43	50
790 [528]	Pieces of dress, all forms and sizes, gross weight	do		1 43	75
791 [837]	Rugs, of pure hemp or tow. (See Carpets, No. 189.)				
792 [29]	Rum, arrack, and kirschwasser, in earthen jugs, bottles, and demijohns, without allowance for breakage or leakage, net weight	do		57 / 12	50
793 [30]	Same, in casks, without allowance for leakage, &c.	do		48 / 10	50
794 [260]	Sacking. (See Linen, No. 583.)				
	Sacks:				
795 [349]	Unmade. (See Bags, No. 31.)				
796 [803]	Ready made. (See Bags, No. 31.)				
797 [52]	Saddles, all classes, upon appraised value	do	55		50
798 [215]	Safes and coffers, of iron, for money, gross weight	do		19	50
799 [128]	Saffron, dry or in oil, net weight	do		3 82	1 00
800 [803]	Sago, palm. (See Starch, No. 930.)				
801 [806]	Salacine, a salt, gross weight	do		2 00	50
802 [807]	Salmon. (See Tunny, No. 1040.)				
803 [804]	Salt, common, for table use, gross weight	do		05	50
	Salts:				
804 [804]	Of atropia. (See Atropia, No. 26.)				
805 [804]	Of strychnine. (See Strychnine, No. 960.)				
806 [804]	Of morphine. (See Morphine, No. 622.)				
807 [805]	Salts and sulphates of, all substances, not otherwise stated, net weight, including in this the weight of the inner wrapper	do		15	50
808 [597]	Sand, fine, of glass. (See Paper, No. 694.)				
809 [815]	Sardines. (See Tunny, No. 1040.)				
810 [393]	Sarsaparilla. (See Essences, No. 366.)				
811 [807]	Sauces, compounded. (See Pickles, No. 723.)				
812 [200]	Sausages, in any case or package, net weight	do		24	50
813 [383]	Sausage, all kinds, in any case or package, net weight	do		24	50
814	Sausages. (See Hams, No. 479.)				
815 [807]	Sausages, large and small, in any sort of covering, net weight, including in this that of the inner wrapper	do		24	50
816	Scales. (See Balances, No. 39.)				
817	Scarfs. (See Blouses, No. 99.)				
	Scarfs:				
818 [194]	Of cotton and other analogous material	sq. m *		17	1 00
819 [195]	Of wool, plain or stamped, and other analogous material	do		23	1 00
820 [196]	Of woolen yarn, twilled, plush-like, or shaggy, velvet-like, and other analogous texture	do		29	1 00
821 [196]	Of wool and cotton. (See Goods, No. 455.)				
822 [197]	Of silk, net weight	kilo		14 34	1 00
823 [849]	Scissors, wrought, less than 14 centimeters long, gross weight	do		86	50
824 [850]	Same, more than 14 centimeters, &c	do		29	50
825 [851]	Same, stamped out, all sizes, gross weight	do		19	50
826 [486]	Screwjacks, iron, gross weight	do		10	50
	Screws:				
827 [762]	Used for wire in pianos. (See Pegs, No. 764.)				
828 [860]	Iron, all sizes, with or without nuts, gross weight	do		19	50
829 [861]	Brass, all sizes, &c	do		29	50
830 [414]	Seafoam. (See Amber, No. 15.)				
831 [820]	Seeds, medicinal, gross weight	do		20	50
	Shawls:				
832 [671]	Long and square, any class, of cotton, not including in the measure the fringe	sq. m *		16	1 00
833 [672]	Wool, all colors, plain, twilled or worked, not, &c	do		38	1 00
834 [673]	Embroidered, in the same material, not, &c	do		50	1 00
835 [674]	Silk, with or without fringe, even when their borders are of other material, not fine metal, net weight	kilo		14 34	1 00
836 [675]	Silk, net, all classes, net weight	do		28 68	1 0

* 1 meter equals 39.37 inches.

Numbers.	Articles.	Weight, measure, or number.	Per cent. on invoice value.	Specific duty.	Duty on each 100 kilos, gross.
	Shawls—Continued.				
837 [775]	Rebozos, a kind of scarf for the head and shoulders, peculiar to the country, of cotton, stamped, marbled, striped, with figures or imitation figures, up to 26 threads of web and woof in a square of ½ centimeter	*sq. m.		$1 06	$1 00
838 [776]	Same, of cotton, &c., of more than 26 and up to 38 threads of, &c	do		1 86	1 00
839 [777]	Same, from 38 to 64 threads of, &c	do		4 38	1 00
840 [778]	Same, of wool, &c., up to 26 threads of web, &c	do		1 27	1 00
841 [779]	Same, of wool, &c., from 26 to 38 threads of, &c	do		1 86	1 00
842 [780]	Same, of linen, &c., up to 26 threads of, &c	do		1 75	1 00
843 [781]	Same, of linen, &c., from 26 to 38 threads of, &c	do		2 53	1 00
844 [782]	Same, of linen, &c., from 38 to 64 threads of, &c	do		5 50	1 00
845 [783]	Same, of silk, &c., up to 26 threads of, &c., net weight	kilo		15 00	1 00
846 [784]	Same, of silk, &c., from 26 to 38 threads of, &c., net weight	do		20 00	1 00
847 [785]	Same, of silk, &c., from 38 to 64 threads of, &c., net weight	do		31 00	1 00
848 [786]	Same, of linen and cotton, in any proportion, up to 26 threads of, &c	*sq. m.		1 50	1 00
849 [787]	Same, of linen and cotton, &c., from 26 to 38 threads of, &c	do		2 19	1 00
850 [788]	Same, of linen and cotton, &c., from 38 to 64 threads of, &c	do		3 75	1 00
851 [789]	Same, of silk, with a mixture of cotton, linen, or wool, in any proportion, up to 26 threads of, &c., net weight	kilo		8 43	1 00
852 [790]	Same, of silk, with, &c., from 26 to 38 threads of, &c., net weight	do		12 32	1 00
853 [791]	Same, of silk, with, &c., from 38 to 64 threads of, net weight	do		20 75	1 00
854 [542]	Sheets of solder or pewter. (See Solder, No. 906.)				
855	Shell. (See Amber, No. 15.)				
	Shirts, cotton, white and colored:				
856 [237]	For men	doz		4 00	1 00
857 [238]	For boys	do		2 00	1 00
	Shirts, cotton, plain or embroidered, with bosoms, collars and cuffs of linen:				
858 [239]	For men	do		7 00	1 00
859 [240]	For boys	do		3 50	1 00
	Shirts:				
860 [244]	Outer, of wool, with or without adornments of silk or other materials	do		9 00	1 00
861 [245]	Linen, plain, white or colored, for men	do		15 00	1 00
862 [246]	Of linen, plain, white or colored, for boys	do		8 00	1 00
863 [247]	Of linen, embroidered, for men	do		24 00	1 00
864 [248]	Same, for boys	do		12 00	1 00
865 [416]	Shoe-pegs, for boots and shoes and other uses, gross weight	kilo		10	50
	Shoes:				
866 [889]	Low, of skin or material not silk, for ladies, and exceeding 18 †centimeters of sole	doz		5 50	75
867 [890]	Leather, all classes, for men, and exceeding 18 centimeters of sole	do		7 00	1 00
868 [891]	Leather or cloth that is not silk, low, for children, up to 18 centimeters of sole	do		5 00	75
869 [892]	Silk, with or without ornaments, not exceeding 18 centimeters of sole	do		7 00	1 00
870 [893]	Silk, for ladies, with or without ornaments, and exceeding 18 centimeters of sole	do		10 00	1 00
871 [645]	Shot, of lead, gross weight	kilo		06	50
872 [388]	Shuttles, tatting, and forms for winding of whatever material, not gold or silver, gross weight	do		86	75
873 [297]	Sieves and strainers, of wire, gross weight	do		19	50
874 [580]	Silk, all manufactures of, pure, of whatever class or denomination, with the exception of those specified, even having a mixture of metal, not gold or silver	do		14 34	1 00
875 [581]	Silk, goods and textures of, including ribbons, sashes, handkerchiefs, kerchiefs, and other analogous materials having *only* on the border or edge a mixture of other material, will pay the quota corresponding to pure silk	do		14 34	1 00
876 [584]	Silk. (See Goods.)				

*One meter equals 39.37 inches. †Centimeter equals .3937 of an inch.

Numbers.	Articles.	Weight, measure, or number.	Per cent. on invoice value.	Specific duty.	Duty on each 100 kilos., gross.
	Silk:				
877 [616]	Manufactures and fabrics of, not specified, net weight	kilo		$14 34	$1 00
878 [766]	Net of, tulle, plain or embroidered, net weight; including in this that of the boxes in which they come and the wrappers around them	do		28 68	1 00
879 [817]	Raw, net weight	do		1 91	1 00
880 [818]	Twisted, net weight	do		8 63	1 00
881 [819]	Floss, all classes and colors, net weight	do		5 73	1 00
	Silver:				
882 [746]	Foils, beaten in leaf, gross weight	do		29	50
883 [747]	Wrought in all classes of pieces, of this metal only, net weight	do		23 00	1 00
884 [748]	With alloy of gold, net weight	do		38 00	1 00
885 [161]	Skins, calf, tanned and dressed, patent leather, kid skins, morocco leather, and all classes of prepared skins and leathers, net weight	do		1 43	1 00
886 [732]	Skins or furs, manufactures of, as muffs, tippets, &c., net weight	do		2 00	1 00
	Skirts:				
887 [398]	Cotton, unmade, embroidered	doz		7 00	1 00
888 [399]	Same, plain	do		5 00	1 00
889 [400]	Wool, of all classes	do		10 00	1 00
890 [401]	Linen, unmade, with or without embroidery	do		15 00	1 00
891 [740]	Slates and slate-pencils, and imitation in pasteboard, iron, brass, porcelain, with or without frames, gross weight	kilo		10	50
892 [608]	Sledge-hammers or mallets of iron or steel, gross weight	do		10	50
893 [175]	Slipper patterns, &c., wool, invoice value	do	55		1 00
	Slippers:				
894 [132]	All kinds, in pattern that have a mixture of silk or metal, net weight	do		57	75
895 [133]	In patterns of silk, with or without a mixture of metal, net weight	do		15 00	1 00
896 [134]	Any material other than silk or metal, and that exceed 18 centimeters of sole	doz		6 00	1 00
897 [135]	Same, not exceeding 18 cents, &c	do		2 00	1 00
898 [743]	Smoothing-irons for laundresses, hatmakers and shoemakers, gross weight	kilo		10	50
899 [829]	Snuff or rappee, net weight; including in this the weight of the flasks or bottles in which it comes, without allowance for leakage or breakage	do		2 50	50
900 [387]	Snuffers and trays of steel, iron, or brass, gross weight	do		29	50
	Soap:				
901 [530]	Common, not perfumed, gross weight	do		15	50
902 [531]	Fine, with or without perfume, gross weight	do		1 15	75
903 [291]	Sockets for end of canes. (See Handles, No. 492.)				
904 [821]	Soda, caustic, gross weight	do		8	50
	Solder or pewter:				
905 [419]	In bars, gross weight	do		29	50
906 [420]	In sheets or leaves, all thicknesses, gross weight	do		32	50
	Spectacles, eyeglasses, mounted:				
907 [95]	In any material other than gold or silver, gross weight	do		1 15	1 00
908 [95]	In gold or silver. (See Jewels, No. 542.)				
909 [412]	Sperm, in blocks or large squares, net weight	do		36	50
910 [409]	Spices. (See Cloves, No. 244.)				
911 [412]	Spirits of wine. (See Alcohol, No. 11.)				
912	Spokes. (See Wheels, No. 1084.)				
913 [357]	Spoons, all sizes, and forks, covered with tin, gross weight	do		19	50
914 [358]	Same, of brass, gross weight	do		29	50
915 [359]	Same, of white metal, not tinned iron or plaque, gross weight	do		43	50
916 [36]	Same, of guilded metal, gross weight	do		1 15	75
917 [361]	Same, of plated metal, gross weight	do		86	75
	Sponges:				
918 [413]	Fine, for toilet, gross weight	do		1 15	75
919 [414]	Ordinary, gross weight	do		29	50
920	Springs. (See Axletrees, No. 28.)				
921 [641]	For doors, gross weight	do		19	50
922 [642]	And axletrees for carriages, gross weight	do		12	50
923 [643]	Spring movements for bells, gross weight	do		29	50
924 [653]	Springs and catches used or opening and closing roofs of carriages, and made of iron or brass, gross weight	do		19	5

Numbers.	Articles.	Weight, measure, or number.	Per cent. on invoice value.	Specific duty.	Duty on each 100 kilos, gross.
925 [798]	Same, for curtains of carriages, gross weight	kilo		$0 20	$0 50
926 [17]	Spurs, common, without gilding or plating, gross weight	do		58	50
927 [435]	Squeezers, of wood or iron, for fruit, gross weight	do		10	50
928 [467]	Stands for liquors. (See Cases, No. 209.)				
	Starch:				
929 [81]	All kinds, gross weight	do		7	50
930 [442]	Corn and other, for cakes, &c., of all materials, net weight	do		12	50
	Statues and busts:				
931 [421]	Fine, of marble, gross weight	do		34	50
932 [422]	Common marble, gross weight	do		19	50
933 [423]	Gypsum or stucco, gross weight	do		9	50
934 [424]	Statues of alabaster, iron, copper, zinc, bronze, and composition of ordinary metals, gross weight	do		29	50
935 [425]	Stearine, in blocks, net weight	do		18	50
936 [15]	Steel, excepting mining bars, net weight	do		06	50
937 [15]	In plates. (See Metal in plates, No. 614.)				
	Steels:				
938 [25]	For knives. (See Steels, No. 939.)				
939 [369]	For table use, with or without handles, gross weight	do		29	50
940 [430]	Steps for coaches, gross weight	do		19	50
941 [428]	Stereoscopes, all classes, gross weight	do		60	50
942 [225]	Stockings. (See Half-hose.)				
943 [627]	Cotton, wool, or linen, all classes and colors, for adults	doz		1 76	1 00
944 [628]	Cotton or linen, all classes and colors, for children	do		66	1 00
945 [629]	Wool, all classes and colors, for children	do		77	1 00
946 [630]	Silk, all classes and sizes, net weight	kilo		14 34	1 00
947 [335]	Stoppers. (See Corks, No 269.)				
	Stones:				
948 [729]	Grind, gross weight	do		03	50
949 [730]	Sharpening, for knives and razors, gross weight	do		12	50
950 [731]	Flint, gross weight	do		10	50
951 [731]	Precious. (See Jewels, No. 542.)				
952	Stoves:				
953 [433]	With ornaments. (See Fire-grates, No. 383.)				
954 [303]	Without ornaments. (See Fire-grates, No. 384.)				
	Strainers. (See Sieves, No. 873.)				
	Straw (*cane or reed*):				
955 [123]	Manufactures of, not specified, net weight	do		43	75
956 [617]	Manufactures of, not specified, net weight	do		43	75
957 [699]	For hats, net weight	do		43	75
958 [368]	Strings, all classes and materials for musical instruments, gross weight	do		43	75
959 [859]	Strips of cotton or linen embroidered. (See Embroidery, No. 359.)				
960 [431]	Strychnine and its salts, net weight; including in the weight the inner wrapper	do		12 00	1 00
	Sugar:				
961 [129]	Common, gross weight	do		10	50
962 [130]	Refined, gross weight	do		15	50
963 [826]	Sulphates of all substances except those specified. (See Salts, No. 807.)				
964 [825]	Sunshades, according to class. (See Umbrellas, No. 1042 to 1045.)				
965	Suspenders. (See Braces, No. 270.)				
	Swords:				
966 [107]	With or without ornaments, engraved or perforated, not gilded or plated on the blade, hilt, sheath, or scabbard, gross weight	do		19	50
967 [108]	With blade, hilt, sheath, or scabbard gilded or plated, gross weight	do		90	50
968 [523]	Blades and pieces that are not plated or gilded, gross weight	do		43	50
969 [537]	Syringes, of all materials not gold or silver, in boxes or not, and their separate pieces, gross weight	do		29	50
	Syrups:				
970 [533]	Not medicinal, without allowance for leakage, net weight	do		1 00	50
971 [534]	Medicinal, all classes and all manufactures, net weight, including in the weight the inner covering	do		50	1 00
	Table-covers:				
972 [269]	Wool, plain or twilled, all colors	sq. m.*		62	1 00
973 [270]	Wool, damask or velvet-like and corded, all colors	do		70	1 00
974 [271]	And bed-spreads, silk, plain, figured, or embroidered, net weight	kilo		14 34	1 00

*1 meter equals 39.37 inches.

Numbers.	Articles.	Weight, measure, or number.	Per cent. on invoice value.	Specific duty.	Duty on each 100 kilos., gross.
975 [535]	Tackle or rigging, all classes, gross weight	kilo		$0 12	$0 50
976	Tacks. (See Nails, Nos. 316 and 317.)				
977 [816]	Tallow, all classes, net weight	do		06	50
978 [731]	Tanned skins. (See Skins, No. 885)				
979 [306]	Tapes, braids, narrow tape edging of cotton, white or colored, net weight	do		2 00	1 00
980 [307]	Same of wool, white or colored, net weight	do		2 68	1 00
981 [308]	Tapes, braids, and narrow edgings of linen or hemp, white or colored, net weight	do		2 00	1 00
982 [309]	Same of silk, all kinds, even with borders of other materials, not of precious metal, net weight	do		14 34	1 00
983 [310]	Same of silk, with mixture of cotton or linen in the entire texture, net weight	do		8 17	1 00
984 [311]	Same of silk, with mixture of wool, wool and cotton, or wool and linen in all the texture, net weight	do		8 60	4 60
985 [311]	Tapes, wool, with bugles. (See Fringe, No. 404.)				
986 [311]	Tapes, silk, with bugles. (See Fringe, No. 406.)				
987 [58]	Tar and pitch, gross weight	do		03	50
988 [74]	Tare, or fruit of carob tree, net weight	do		05	50
989 [839]	Tea, all classes, net weight	do		75	1 75
990 [94]	Telescopes and opera-glasses, with or without case, gross weight	do		1 15	1 00
	Textures:				
991 [841]	Cotton, according to class. (See Cotton goods, Nos. 279 to 288.)				
992 [841]	Wool, according, &c. (See Woolen goods, Nos. 1115 to 1118.)				
993 [841]	Linen or hemp, according, &c. (See Linen goods, Nos. 583 to 588.)				
994 [842]	And all manufactures of pure silk, excepting those specified, of all classes and denominations, net weight	do		14 34	1 00
995 [843]	Of silk, with mixture of fine metal in any proportion and any figure or form, upon appraised value	do	55		1 00
996 [843]	Silk, with mixture of any material, according to class. (See Goods, Nos. 448 to 454.)				
997 [843]	Metal, according to class. (See Galloon, Nos. 420 423.)				
	Thimbles:				
998 [386]	Not gilded or plated, gross weight	do		29	50
999 [386]	Gilded or plated. (See Metal, No. 612, and plaques No. 737.				
	Thread:				
1000 [258]	Cotton, linen, or hemp, or mixture of these materials for embroidery, gross weight	do		57	1 00
1001 [512]	Cotton, on spools, up to 275* meters each	doz		14	1 00
1002 [515]	Cotton, in balls or skeins, net weight	kilo		1 43	1 00
1003 [514]	Cotton, carded for long shawls, net weight	do		1 43	1 00
1004 [514]	Wool. (See Yarn, No. 1122.)				
1005 [515]	And cord, common, coarse of crude hemp, including such as is half twisted, all thicknesses, net weight	do		12	50
1006 [516]	Hemp, in spools, all colors, up to 275 meters each	doz		18	1 00
1007 [517]	Fine, of hemp, in balls or skeins, net weight	kilo		15	1 00
1008 [518]	Linen, in spools, up to 275 meters each	doz		20	50
1009 [519]	Linen, balls or skeins, net weight	kilo		2 16	1 00
1010 [520]	Linen, carded, for shawls, net weight	do		2 16	1 00
1011 [521]	Silk in spools, net weight	do		8 60	1 50
1012 [550]	Thongs. (See Whips, No. 1080.)				
	Tiles:				
1013 [131]	Glazed	M		6 60	50
1014 [841]	Roof, of clay, of all classes	do		1 65	50
	Tin:				
1015 [522]	All classes, net weight	kilo		14	50
1016 [522]	Tin. (See Iron, No. 527.)				
1017 [291]	Tips for billiard cues. (See Points, No. 745.)				
	Tobacco:				
1018 [827]	Chewing, net weight	do		62	50
1019 [828]	Dust (dipping), net weight	do		1 00	50
1020 [830]	Leaf, *not* Virginia, net weight	do		1 25	50
1021 [831]	Leaf, Virginia, net weight	do		16	50
1022 [832]	Cigarettes, all classes, including the paper boxes in which they come, net weight	do		1 25	50
1023 [833]	Cigars, net weight	do		4 90	50
1024 [834]	Smoking, net weight	do		1 25	50
1025 [848]	Tongs and shovels for fire-places or stoves, gross weight	do		19	50

Numbers.	Articles.	Weight, measure, or number.	Per cent. on invoice value.	Specific duty.	Duty on each 100 kilos, gross.
1026 [507]	Tools and instruments of iron, brass, steel, or wood, or composed of these materials, for artisans, gross weight	kilo		$0 19	$0 50
1027 [598]	Toothpicks, all classes, *not* gold or silver, gross weight	do		29	50
1028 [26]	Tooth-washes. (See Perfumery, No. 713.)				
1029 [429]	Tow of hemp, gross weight	do		12	50
1030 [540]	Toys and playthings, all classes and materials, gross weight	do		40	50
1031 [774]	Traps, rat, mouse, and for other animals, gross weight	do		19	50
1032 [127]	Trays: Flat. (See Waiters, No. 1065.)				
1033	Hollow, oval. (See Waiters, No. 1065.)				
1034 [748]	Trays, for snuffers. (See Snuffers, No. 900.)				
1035	Trimmings. (See Fringes, Nos. 403 to 406.)				
1036 [154]	Trunks: Leather, of all kinds, with iron or brass braces and trimmings, gross weight	do		60	75
1037 [155]	Wood, and wood and leather, braces of iron, trimmings of iron or brass, gross weight	do		40	75
1038 [857]	Trusses, gross weight	do		43	50
1039 [626]	Tubes for lamp wicks, not silver or gold, gross weight	do		29	50
1040 [127]	Tunny (fish), sardines, salmon, and all other fish, pickled, salted or in oil, including sardines in tomato or butter, net weight; including in the weight the inner covering	do		25	1 00
1041 [393*a*]	Turpentine, naphtha, and crude petroleum (executive decree of June 25, 1880)		88		80
1042 [706]	Umbrellas, shades, and parasols, cotton	each		55	1 00
1043 [707]	Same, wool	do		80	1 00
1044 [708]	Same, linen	do		75	1 00
1045 [709]	Same, silk	do		1 65	1 00
1046 [236]	Underskirts: Cotton netting, net weight	kilo		1 50	1 00
1047 [251]	Silk netting, net weight	do		14 34	1 00
1048 [340]	Uppers: For unsoled slippers. (See Slippers, Nos. 894 and 895.)				
1049 [341]	For gaiters, unsoled, of silk, with or without ornaments for ladies and children, net weight	do		15 00	1 00
1050 [342]	For gaiters, unsold, of leather or goods other than silk, with or without ornaments, for adults and children, net weight	do		3 00	1 00
1051 [865]	Valerianates (medicine), of all substances, net weight; including in the weight the inner wrapper	do		10	1 00
1052 [173]	Valises. (See Bags, No. 30.)				
1053 [151]	Varnish, all kinds, net weight including in the weight the inner covering, without allowance for leakage or breakage	do		10	50
1054 [554]	Vegetables, preserved, dry or in juice; including in the weight the inner wrapper	do		36	50
1055 [872]	Velocipedes, gross weight	do		19	50
1056 [372]	Veneers, of white wood, for guitars or pianos, gross weight	do		19	50
1057 [373]	Veneers of fine wood; square feet	M		10 56	70
1058 [873]	Veratria (vegetable alkaloid), net weight; including in the weight the inner wrapper	kilo		8 00	1 00
1059 [712]	Vermicelli, macaroni, and like substances, gross weight	do		05	50
1060 [370]	Vests, of wool, of stocking net	doz		10 00	1 00
1061 [862]	Vises, blacksmiths, gross weight	do		10	50
1062 [877]	Vinegar: In bottles or demijohns, net weight; without allowance leakage or breakage	kilo		10	50
1063 [878]	In barrels, net weight; without allowance for leakage	do		05	50
1064 [884]	Vizors of leather, gross weight	do		29	50
1065 [379]	Waiters, trays, bottle and glass carriers, all sizes of iron, brass, wood, copper, or paper, gross weight	do		29	50
1066 [655]	Wafers: Common, gross weight	do		43	50
1067 [656]	Of gum, gross weight	do		1 15	75
1068 [499]	Wagons, all classes and dimensions	each		80 00	50
1069 [553]	Washbowls, pitchers and cups, of leather, gross weight	kilo		29	50
1070 [794]	Watches, all classes and materials, with or without precious stones; upon invoice value		13		1 00
1071 [37]	Waters: Aromatic, composed, distilled or spiritous, for toilet or medicinal uses, net weight; including in the weight the inner covering	do		50	75

Numbers.	Articles.	Weight, measure, or number.	Per cent. on invoice value.	Specific duty.	Duty on each 100 kilos., gross.
	Waters—Continued.				
1072 [38]	Mineral, natural or artificial, net weight; including the weight or the inner covering	kilo		$0 20	$0 50
	Wax:				
1073 [301]	White or yellow, net weight	do		63	75
1074 [302]	Virgin, net weight	do		57	
1075 [541]	Sealing, gross weight	do		86	75
	Web:				
1076 [844]	Of iron wire, gross weight	do		19	50
1077 [845]	Of brass wire, gross weight	do		29	50
1078 [846]	Horsehair, all classes and colors, for covering furniture	sq. m *		22	50
1079 [798]	Weighing machines. (See balances, No. 39.)				
	Whalebone:				
1080 [149]	Worked, gross weight	kilo		29	50
1081 [150]	*Not* worked, gross weight	do		19	50
1082 [524]	Whalebone. (See Bone, No. 109.)				
1083 [864]	Wheat, net weight	do		04	50
1084 [623]	Wheels and spokes for carriages; upon appraised value		55		50
1085 [798]	Wheels, small. (See Pulleys, Nos. 761 and 762.)				
1086 [798]	For bits of iron or brass. (See Bits, No. 79.)				
1087 [801]	Separate, for carts of all dimensions	pr		13 20	50
1088 [802]	Separate, for coaches and other carriages	do		20 00	50
1089 [356]	Whips, all classes not having gold or silver butt, gross weight	kilo		57	50
	Whisky:				
1090 [31]	In earthern jugs, bottles, and demijohns; without allowance for breakage or leakage, net weight	do		$ 38 / 38 $	50
1091 [32]	In casks, without allowance for breakage or leakage, net weight	do		$ 33 / 05½ $	50
1092 [668]	Wick of cotton, for candles, gross weight	do		13	50
	Wicks:				
1093 [624]	Of cotton, for lamps, gross weight	do		28	50
1094 [625]	Of cotton, for pocket flint and steel	do		29	50
1095 [347]	Window-blinds, painted in colors with oil or plain, gross weight	do		29	50
1096 [879]	Wine, white, all classes, in bottles or demijohns, without allowance for leakage or breakage, net weight	do		$ 23 / 08 $	50
1097 [880]	Same, in vessels of wood, without allowance for leakage, net weight	do		$ 17½ / 02½ $	50
1098 [881]	Wine, red, all classes, in bottles and demijohns, without allowance for breakage, net weight	do		$ 14 / 04½ $	50
1099 [882]	Same, in vessels of wood, without allowance for leakage, net weight	do		$ 10 / 01½ $	50
1100 [883]	Wines, medicinal, of all substances and manufactures, net weight	do		1 00	75
1101 [44]	Wire, iron or steel, galvanized or not, for whatever use, except that proved to be for telegraph, according to No. 89, of article 16, gross weight	do		10	50
	Wire:				
1102 [45]	Iron, barbed for fences, and hooks and nails, to fasten them, gross weight	do		02	50
1103 [46]	Brass or copper, gross weight	do		29	50
1104 [47]	White, for flowers and embroideries, twisted, without being plated, gross weight	do		1 00	75
1105 [48]	Not included in No. 1104, flat, round or twisted, and cord of white or yellow metal, not gold or silver plated, gross weight	do		1 20	1 00
1106 [49]	Same, including No. 1104, gold or silver plated, gross weight	do		2 40	1 00
1107 [50]	Same, of silver, gilded or not with gold, gross weight	do		7 00	1 00
1108 [51]	Covered for crinolines, gross weight	do		12	50
1109 [405]	Worked for hats, Mexican style, &c. (See Wire, Nos. 1105 to 1107.)				
1110 [797]	Springs, for furniture and other uses, gross weight	do		29	50
1111 [120]	Wood or gutta percha, manufactures of, not specified, gross weight	do		29	50
	Wool:				
1112 [547]	In the fleece, net weight	do		12	50
1113 [548]	Carded, net weight	do		18	50
1114 [584]	Wool. (See Goods.)				
1115 [570]	Woollen goods and textures light, suitable for dresses, plain white, or colored, as muslins and other analogous materials	sq. m *		28	1 00
1116 [571]	Same, or twilled (as merinos and cashmeres), worked, twilled in strips, and embossed of all colors	do		28	1 00
1117 [572]	Suitable for furniture (as damask *cotelina* reps and others similar)	do		35	1 00

*1 meter equals 39.37 inches.

Numbers.	Articles.	Weight, measure, or number.	Per cent. on invoice value.	Specific duty.	Duty on each 100 kilos, gross.
	Wool—Continued.				
1118 [573]	Same, *not* suitable for dresses, plain, worked, twilled or sergelike that for their quality cannot be comprehended in Nos. 1115 and 1116, nor in Nos. 210 and 243	sq. m..		$0 80	$1 [illegible]
	Wraps:				
1119 [5]	Of fine wool. (See Blouses, No. 99.)				
1120 [5]	Of skins. (See Skins, No. 886.)				
1121 [702]	Wristlets of fur. (See Skins, No. 886.)				
	Yarn:				
1122 [417]	Of wool, net weight	do		1 72	1 [illegible]
1123 [507]	Dirty. See Cotton, No. 266.)				
1124 [508]	Cotton, white or brown, net weight	do		62½	1 [illegible]
1125 [509]	Cotton, colored, net weight	do		96	1 [illegible]
1126 [510]	Wool, all classes and colors, net weight	do		1 72	1 [illegible]
1127 [511]	Linen, hemp, or their tows, white or colored, net weight	do		12	[illegible]
1128 [753]	Yeast powder, net weight	do		12	[illegible]
1129 [894]	Zinc, in sheets, gross weight	do		10	[illegible]

* 1 meter equals 39.37 inches.

ART. 19. From the amount of import duties 1.37 per cent. shall be delivered to the corporations of the respective sea-port or frontier custom-houses.

ART. 20. I. To liquidate the duties of merchandise rated at gross weight shall be included in this that of the common covers of wood, clay, or glass of whatever dimensions that contain them, otherwise when the merchandise is rated at net weight duties will be collected for said common covers.

II. Fine covers remain subject to the payment of the corresponding duties according to their class, material, and value, even when the merchandise which they contain is rated at gross weight.

III. Interior wraps (*abrigos*) of merchandise shall not pay duty up to ten meters of coarse texture of cotton, linen, hemp, or wool.

IV. Blankets (*sarapes*), coverlets, or blankets (*frasadas*) are not comprehended in the preceding exemption, which even when they come as wraps, shall cause the corresponding duties of this tariff.

CHAPTER VIII.

(See note 1, Appendix A, p. 351.)

APPRAISED VALUE OF MERCHANDISE.

ART. 21. I. Merchandise not specified in the tariff of this law shall pay 55 per cent. upon appraised value upon the highest wholesale market price. This value will be calculated by the appraiser of the custom-house who has been named to dispatch the goods and the interested party, in the presence of the collector of the port and the commander of the guards of the custom-house, or the clerk who they may name to act in their stead.

II. In case the consignee of the merchandise does not conform with such value, then the interested party and appraiser shall name a third person whose decision shall be definitive. If there should not be consent in the naming of the third party the collector shall designate five persons between whom the importer shall choose one, and not doing it soon afterwards, the first one proposed shall be taken as the chosen one.

ART. 22. When merchandise has to pay import duties upon invoice value, and the appraiser and the collector judge that the prices specified are very low, three appraisers, one named by the custom-house, another by the interested party or consignee, and the third by the same appraisers, shall name in anticipation in case of discord, and on such value that they may declare shall the duties have to be paid, not in any way taking into consideration the original consular invoice. If this valuation exceeds ten per cent. of the price declared in the invoice, the interested party shall pay besides a fine of twenty-five per cent. upon the value made by the appraisers.

CHAPTER IX.

LOADING OF VESSELS IN FOREIGN COUNTRIES.

ART. 23. Those who send merchandise, dispatch the vessels, captains, supercargoes, consuls, and merchants that may have to certify to the consular invoices of the trans-

mitters, and the captain's consular manifests, shall respectively comply with the formalities that are expressed in the following sections of this chapter:

SECTION FIRST.—*Obligations of the shippers or transmitters.*

ART. 24. (For important changes, see note 3, Appendix A.) Whatever individual of a foreign country sends objects of commerce to this republic, even though free of duties or for federal offices of the states, they shall make out invoices in triplicate of all the commodities, fruits, or effects that he remits to each consignee.

These invoices shall be made out according to Model No. 1 that follows at the end of this tariff law, and they must contain—

I. The name of the vessel, that of its captain, that of the port to which it is directed, that of the consignee of the articles contained in the invoice, and the name of the nation from which the merchandise originally proceeded, the date of the invoice, and the signature of the transmitter.

II. The expression, by figures and letters, of the number of bales, boxes, casks, packages, or whatever class of package in which the merchandise may come.

III. The mark and number that must be placed on each package excepting in respect to the following: iron machinery and material for railroads, which can come manifested with the weight of each part.

IV. A. The name, material, and class of the merchandise specified according to the tariff of this tariff law.

B. The quantity, by figures and letters, that must pay by the piece, pair, dozen, or thousand.

C. The net weight of merchandise that must pay by net weight, with the expression of the unit of weight which it takes for its base.

D. The length, width, and number of pieces of merchandise that must pay by measurement, expressing the unit of measure serving as the base.

E. The pieces of merchandise which must pay upon the invoice or appraised value, expressing the unit of money which it takes for its base.

V. In the invoices shall be expressed the value of the goods free of duty.

ART. 25. (For important changes, see note 3, Appendix A.) When in the same package merchandise comes expressed in the fractions of this tariff relating to small ware and hardware of different rates among them, each class must come in a separate wrapper, and be marked on it its respective weight, that the weight of all the bulk may be applied proportionally to the classes of merchandise which it includes.

If they lack these requisites, the duty that corresponds to the merchandise which has the highest rate fixed will be demanded upon the weight of the entire bulk.

ART. 26. (For important changes, see note 3, Appendix A.) I. The transmitters of effects shall present for their certification three copies of each invoice to the consul, consular agent, or private commercial agent of Mexico who resides in the port where the vessel loads or in the place from which the merchandise proceeds.

In places where there is no consul or Mexican agent, the invoices may be certified by the consul of any friendly nation, and if there should not be one, by two merchants established in the place of the permission.

II. Effects which come to the Mexican territory in transit will be subject relatively to invoices and other custom-house requisites which are arranged by Chapter XVI of this tariff.

ART. 27. (For important changes see note 3, Appendix A.) I. When any invoice shall lack any of the precautions contained in fractions I, II, III of article 24, there shall be imposed upon the consignee a fine of not less than $5 or more than $25, for each fault, according to what the collectors may think best in each case.

II. When there are in the invoices interlineal notes, erasures, defects, or corrections, there shall be imposed a fine of not less than $50 and not more than $200.

III. When the manifestation of merchandise in consular documents is made in an ambiguous manner, designating only in general terms and without subjection to the nomenclature of the tariff of this tariff law, there shall be imposed a penalty of double duties on the merchandise which comes declared ambiguously, having this case to examine the entire bulk of the cargo.

IV. Invoices can continue to come in the language of the country from which the effects proceed, and the consignees will not incur the penalty of ambiguity pointed out in the preceding fraction always that the declarations are made in a determinate and clear manner that leaves no doubt respecting the rates or the tariff which must be applied to it.

ART. 28. (For important changes see note 3, Appendix A.) I. In fault of any of the requisites designated in fraction 4 of article 24, when said fault does not produce ambiguity, the penalty for which is double duties, according to fraction III of article 27 of this tariff law, the collectors shall impose in each case, according to the circumstances that concur, and for each one of the faults, a fine whose maximum shall not exceed $200.

II. When for lack of conformity of the interested parties it must, according to this tariff law, submit the case to a judicial decision, the latter is intended to determine if it had been a fault, being in such case the exclusive power of the collectors to fix afterwards the amount of the fine within the maximum designated.

ART. 29. (For important changes see note 3, Appendix A.) I. For the simultaneous fault of the consular certification and receipt of the invoices, the penalty of paying double duty upon the merchandise which comes without invoice is imposed.

II. In case that the invoices are presented with the consular certification and do not present at the same time the corresponding receipt of the Mexican consul, a prudent time shall be conceded for its presentation, previously guaranteeing to the satisfaction of the respective custom-house.

III. When merchandise that comes without the consular certification and receipt are those which do not cause duties for the simultaneous fault of said documents, a fine shall be applied of not less than $5 nor more than $100, without prejudice that the fault is absolute.

The interested parties may form provisionally the invoices with all particulars, doing the same at their cost and the due intervention of the custom-house until they present the originals.

IV. When the invoices do not express the value of the free effects there shall be imposed upon the consignee a fine of not less than $5 nor more than $100.

SECTION SECOND.—*Obligations of captains and supercargoes.*

ART. 30. The captain or supercargo of all classes of ships bringing merchandise to the republic sailing from any foreign port or ports are obliged to make one general manifest of such merchandise that they may bring for each port in Mexico according to Model No. 2, which must contain—

I. Name and class of vessel or ship, of what nationality, number of tons in writing and numbers, name of captain, name of the port where she came from, the name of the Mexican port to which she is bound, and the name of the consignee.

II. Number of bales or packages, boxes, barrels, or packages, with their respective marks and numbers, with also the gross weight expressed in numbers and writing.

III. General class of merchandise, the name and residence of the shipper as well as each consignee, with date, and signed by the captain.

IV. Should any sailing vessel when bringing merchandise to Mexican ports have merchandise for foreign ports, the captains must not only comply with the foregoing regulation but also with what follows:

A. Deposit in the custom-house of each port in Mexico in which she may stop the respective documents of the cargo destined for foreign ports, presenting successively in such custom-houses a general manifest of said cargo made in the port where the ship was loaded, containing the total number of bales or packages, boxes, barrels, and packages, of all classes, with marks and numbers distinguishing each part of the cargo that is destined for each foreign port (if more than one). This manifest must come authorized by the Mexican consul or agent in the foreign port where the ship was loaded; if there are not either of these authorities, then by agent of other friendly nation; if this fail, then by two merchants in good standing.

B. The custom-house of the port in Mexico where the vessel stops first will note on the manifest the anterior paragraph, so as to show in the other Mexican ports that the captain has presented his documents. In the last port in Mexico where the vessel stops the custom-house will cancel his manifest, giving him a receipt for the same and sending the document to the minister of finance.

C. In case captains do not present their general manifests of the merchandise that they bring from a foreign port in the custom-house of the first Mexican port they may touch, then said custom-house will make, at the cost of the captain, such manifest, so as to let the other custom-house where the ship may stop note the same, so that it may be canceled according to law, fining the captain $1,000 for this fault. Should it be absolutely necessary, the merchandise must be discharged so as to form such manifest.

V. The captains of steamers who bring merchandise to Mexico, and at the same time for foreign ports, besides complying with the obligations detailed in this tariff for captains and supercargoes, must present in the first Mexican port that they touch a list of the merchandise that they are taking for foreign ports, naming the lots they are taking for each port, so that such notice can be revised by the collector of said port and sent in a sealed envelope by said captain to the collector of customs of the next port where the steamer may touch, repeating this in each port up to the last, where such notice will be taken charge of and placed in the archives of the office, after taking a certified copy to send to the minister of finance.

ART. 31. I. The captains or supercargoes will present, to be certified before the consul, consular or commercial agent of Mexico, who resides in the port where the vessel is loaded, three copies of the general manifest of the merchandise which she brings for each one of the ports of the republic; and only in case there does not reside in such

port one of the functionaries above named, then the certificate can be taken from the consul of a friendly nation. If not this, then a certificate from two established merchants. Receiving these documents, the captains or supercargoes are bound to present them precisely at the first Mexican port where they commence to discharge cargo.

II. The obligations expressed in the foregoing paragraphs must be complied with by the captain or supercargo, even if the vessel comes in ballast.

III. When vessels in ballast are dispatched directly to a Mexican port where there is no custom-house of the first class, with the exclusive object of loading animals or wood, the captains will present to said custom-house his manifest made out according to the above-mentioned restrictions, expressing in the same the number of sailors and quantity of food he carries.

ART. 32. The captains or supercargoes are obliged to give to the officials of the custom-house when they come on board, when the ship has come to anchor, the general manifest of the cargo they bring, a list of the passengers, with class of their baggage, same as Model No. 3, as well also an entire list of the food or rations that are existing on board, according to Model No 4.

ART. 33. The captain is obliged to keep in good state the seals that are placed by the custom-house officials on the hatches and bulkheads; should such seals be broken the captain has to prove that he was not the culpable party; if he cannot do this, then to be fined not exceeding $500.

ART. 34. Should any of the requisites designated in the three first fractions of article 30 be not complied with, the delinquent can be fined in the sum of not less than $5 nor to exceed $25 for each fault, this being at the option of the collector of the port. Should there be found in the general manifest any interlining, rubbing out, additions of words, or altering of words, a fine will be made of not less than $50 and not exceeding $200.

ART. 35. Should there be any evasion or fraud in the certificates and consular receipts of the manifest before expressed in article 31, or should these documents not be forthcoming, the captain shall be fined $1,000. If he presents the manifest with the consul's certificate and without his receipt, then a reasonable time will be given him for such to be sent for, in the mean time giving a bond to the satisfaction of the collector for the production of same.

ART. 36. Should the documents, as expressed in article 32, not be given to the custom-house officers when they come on board, after the ship has come to an anchor, the fine will be not exceeding $200.

ART. 37. I. The captains or supercargoes have the privilege of rectifying and making additions to their manifests during the time of forty-eight hours, running from the time when the ship came to an anchor, giving the reasons for such additions or changes, protesting at foot that they proceed legally and in good faith; this document must be made in duplicate, according to Model No. 5.

II. The time indicated, forty-eight hours, are counted except on days when the custom-house is closed or when by natural causes the captain cannot communicate with shore.

III. The changes or additions of manifest presented by the captain to the custom-house are examined, and without admitting or effusing (which solely depends upon the Secretary of the Treasury), the same are sent by first mail to the Secretary of the Treasury, with the corresponding information and opinion of the collector of customs of the port.

These proceedings do not impede the discharging of the vessel, which can be commenced at once.

IV. In case the changes or additions of the manifest make more than 5 per cent. or make less than 5 per cent. of the total number of packages which the general manifest of the vessel calls for, the captains or supercargoes, if they cannot pay then the consignees, will be fined by the collector of the port from $100 to $1,000, according to the gravity and circumstances of the case; a note of good value can be taken for the amount of fine until the Secretary of the Treasury decides the question.

SECTION THIRD.—*Obligations of the consuls of the republic.*

CERTIFICATES FROM CONSULS.

ART. 38. The consuls, vice-consuls, consular or commercial agents of the republic in a foreign country certify, in the form of Model 6, three copies of each *factura* or manifest, which must respectively be presented by the shipper of the merchandise and the captain of the vessel. Such documents cannot be certified by the consuls if they are presented after the respective ships have left the port.

ART. 39. The consuls and agents will use two books to copy in, one the manifests and in the other an extract of the invoices, giving at once to the interested party a receipt for the invoice or manifest which he may present.

The manifest as well as the invoice must be numbered consecutively, closing such numeration at the end of each fiscal year.

ART. 40. I. The consul will return one certified copy of the manifest or respective invoices to the captain or supercargo of the vessel, or to the shipper of the merchandise; another copy of the manifest and one of each of the invoices will be remitted by the consul under seal by the same vessel that takes the merchandise to the collector of the port to where the vessel is bound. To the collectors of the frontier custom-houses the consul will also remit the same class of documents by the first safe opportunity. The third copy of same documents will be sent direct to the Secretary of the Treasury by same ship, if not, then by first mail.

II. In case the invoice which has to be presented by the importers to the respective custom-house has been mislaid, the consuls or consular agents of the republic can give, on petition of the interested party, certificates as in Model No. 7.

ART. 41. The Mexican consuls must indicate all circumstances that they think important respecting mercantile expeditions that may be coming to any port of the republic, more particularly when they come from the port where he resides, and give an account to the Secretary of the Treasury by the quickest route possible.

ART. 42. The consuls and consular agents are obliged to give to captains of vessels and merchants who are wishing to bring merchandise to the republic all necessary data on importation that they may wish respecting the legislation and statistics of same.

ART. 43. I. Each month the consul and consular agents will remit to the Secretary of the Treasury a notice of the ships dispatched to the ports of the republic, expressing their names and nationality, the captain, the names of the passengers, and general information as to the corgo she brings. Also sending notice of the vessels that arrive at the port of their residences coming from Mexico, with a list of the goods they bring, names of the passengers, the port from where the vessels came, how many days of navigation, and any other information they may think necessary.

II. Not alone by each vessel they dispatch, but on the first day of each month the consul and consular agent must send to the collector of each port to which they may have dispatched merchandise a copy of current prices of the merchandise in the place where they reside, also sending each month the same to the Secretary of the Treasury.

ART. 44. For the receipt and certificate which the consul gives of a general manifest he charges $10; in case it is a vessel only in ballast, then the fee is $2.

For the receipt and certificate of each invoice, the value of which exceeds $50, to charge a fee of $4, and for certificate of any *factura* that has been mislaid a fee of $2.

CHAPTER X.

OF VESSELS THAT ARRIVE AT MEXICAN PORTS OWING TO HAVING HAD ACCIDENTS, ETC.

ART. 45. All vessels, national or foreign, that enter into the territorial waters of the republic with the object of repairing, to take water, obtain fresh food, or for any other forced cause, remain subject to the rules of this arancel, as well as also to those detailed in the following articles:

ART. 46. I. All ships, national or foreign, that come to Mexican ports by force of stress of weather, with the object of repairing damages, will have administered to them in the act, by the custom-house or the captain of the port, all aid that is necessary, permitting the discharging of all or part of the cargo which she may be loaded with, if it is thought they will suffer damage, or it is absolutely necessary for the repairing of the ship.

Of such discharge the custom-house will take a specified note, expressing in it the quantity of packages, marks and numbers of the bales, and their contents, if they can determine them, depositing all in the warehouses of the custom-house, or in another warehouse satisfactory to the collector, should the custom-house not have any. This is done with the knowledge of the consul of the country to which the ship belongs.

II. In case they should be national ships that are placed in the situation as comprehended in the foregoing article, then to apply to the federal judge of the district; should there not be any, then to the next federal authority, so that with his accord all necessary operations can be performed.

III. The nation is not responsible for any loss, damage, demerit, diminution, deterioration that may be caused to the ship or cargo by these accidents.

A full and instructive account which must be made will be sent by first mail to the Secretary of the Treasury.

ART. 47. The captains of vessels, loaded or discharged, that arrive at the ports of the republic, with the object of taking water or food, must declare the same to the custom-house in writing at the time when the custom-house officers present themselves, who will close and seal the hatches, which are not to be opened until the moment in which the ship proceeds to sea.

In cases of this kind, should the collector think it necessary, he will give orders that one guard or other officer of the custom-house to remain on board until the sailing of

the vessel, also taking any other steps that he may think necessary under the circumstances.

ART. 48. The captains of foreign vessels who come to any port of the republic with the intention of going into winter quarters are obliged to manifest immediately to the officers of customs who come on board, showing a list of their stores, and declaring that they do not bring merchandise nor objects of commerce, only the produce of their fishing, *i. e.*, if they are whaling vessels.

In case the officers of the custom-house think there is an intention of fraud, they will visit the hold of the vessel to be sure there is not anything on board except what is necessary for the sailors.

ART. 49. When a foreign vessel arrives at any of the ports of the republic, with the object of repairing damages, an invoice must be immediately made of all she contains, *i. e.*, if she brings merchandise. At once the officers of the custom-house will visit the hold, then seal the hatches so that they cannot be opened except in case of necessity, and this only can be done in the presence of a custom-house officer named by the collector.

Should the captain wish to discharge the merchandise, he can do so after he has the invoice, depositing said merchandise in the custom-house warehouses; the government has no responsibility whatever for any loss, damage, demerit, diminution, deterioration that the goods may suffer.

When the ship is ready to continue on her voyage, the goods will be taken from the custom-house warehouses to be re-embarked, comparing the same with the invoices when received. If it is necessary for the captain to sell merchandise, and he petitions the custom-house and it is granted, an invoice with all particulars will be made and the corresponding duties paid.

All these incidents must be written in form with their corresponding papers from which to give an account to the Secretary of the Treasury.

ART. 50. When all or part of the cargo brought by any vessel has been wrecked on the coasts of the republic, the goods must be deposited in the warehouses of the nearest custom-house, giving notice to the consul of the country to which the vessel belongs, if there is one, at the nearest point where the ship has been lost; if not, then to the federal judge of the district, so as to determine what must be done with the merchandise, if in six months it has not been claimed by the legitimate owners.

CHAPTER XI.

THE ARRIVAL OF VESSELS IN MEXICAN PORTS BRINGING MERCHANDISE.

ART. 51. I. The vessel of whatever nation can bring cargo to one or more ports of the republic, making separate documents according to the law expressed in this tariff for each of the ports in which the merchandise has to be discharged.

The custom-house of the port in which the first discharge of the vessel is made shall give notice to the rest to whom she comes consigned that they have received the corresponding goods. Until the goods for one port are discharged, the documents corresponding to the cargo for other ports are detained in the custom-house.

II. The captains of steamers of the line who make periodical trips to Mexican ports at fixed times, bringing merchandise for two or more ports, instead of giving to the first custom-house at which she may arrive the documents that cover the cargo that she brings for the others, gives to the guards who make the visit when she anchors a copy of the general manifest of the merchandise for each one of the Mexican ports on her line.

The concession thus given does not except the captain for any fines that may have to be imposed for infraction of any of the custom-house laws, nor for the non-complying of any simple disposition that the collectors of the ports may dictate in exercising their functions.

ART. 52. When a merchant vessel has come to an anchor and passed a sanitary inspection, there will come on board the commander of the guards or the officer of customs named by the collector, who will get from the captain the list of stores, passengers and their baggage, the receipt or receipts of the consuls, and the manifest or manifests of all the cargo which is contained in the vessel (even when the merchandise has to be discharged in different ports), the closed documents that the ship has brought for the custom-house or the Secretary of the Treasury. This finished, the officer will proceed to seal the hatchways, which cannot be opened until such time as they commence discharging.

ART. 53. The above preventions are not obligatory against steamers that are subsidized by the Mexican Government who come to the ports named in their contract solely to receive passengers, correspondence, or national produce without bringing merchandise for the same ports.

ART. 54. If during the time at sea there have been storms that have obliged the captain of the vessel to throw part of the cargo overboard, or for other serious causes he has

been obliged to put into another port, and had to sell part of her cargo, the captain or supercargoes must give a declaration in writing to the commander of the guards or the officer of the custom-house at the time when he produces his other documents referred to in article 52.

ART. 55. Immediately when the collector receives the declaration as named in the previous article, he will notify the federal judge of the district, so that he may take all steps necessary to find out what has occurred.

If it be a case of jetsam, it is required not only that the passengers and crew shall confirm and declare in the affirmative, but that the log-book shall be produced showing the proper entries conforming with their statements. It is also necessary to prove what winds caused or drove the vessel to the port, as well also that such is a fact, legalized by the authorities of the port.

Should all be proved, then no duties will be imposed on the merchandise that was thrown overboard or sold.

CHAPTER XII.

RENOUNCING THE CONSIGNMENT OF MERCHANDISE.

ART. 56. I. The consignee, who is the person designated by the shipper in the consular invoice to receive the goods at the port where consigned, is the only person who can have the necessary papers made so that said goods can be dispatched, as well also for the liquidation and payment of duties.

II. The consignee can renounce the consignment, giving to the custom-house the consular invoice, this to be done during twenty-four hours counting from the time that the vessel came to anchor, only if they could not communicate with the land or the custom-house is closed.

III. When there are various consignees, the renouncing of the consignment ought to be successive according to the order in which they are named in such invoice.

ART. 57. Having passed the twenty-four hours named in the article above, it is understood that the consignation is accepted.

ART. 58. If the shipper of the goods whose consignment has been refused is a citizen of Mexico, the collector of the port will name two merchants established there, as consignees.

ART. 59. If one of them renounce and the other admit, then he is alone the consignee; the renouncing of such consignees named officially should be done within forty-eight hours after being named; if this is not done it is understood that they accept such consignment.

ART. 60. If those named should renounce, and the goods are of such a kind that they cannot be warehoused without loss or detriment, the collector of the port will dispose of the same at public auction to the highest bidder, depositing in the custom-house warehouse all other goods, notifying through the newspapers all that has occurred so that it may come to the notice of the party or parties interested.

ART. 61. Should the term of six months pass, and no one has presented a legal claim to the deposited goods, then the custom-house will proceed to sell the same by public auction.

ART. 62. The produce after having paid duties and all other expenses will remain deposited in the custom-house.

ART. 63. If the shipper of the goods, the consignment of which has been refused, should be a foreigner, the collector of the port will officially advise the consul or vice-consul representing the nation of the shipper that if within the term of three days he will receive the consignment, and passing this time and not having officially refused, it is understood he will accept the same. The consuls or vice-consuls not accepting the consignment, then proceedings will be taken according to articles 58 to 62, inclusive, in this chapter.

ART. 64. In case it appears in the consular manifest that a person is a consignee of merchandise, and has not received his consular invoice, and wishes to renounce the consignation, he must do the same in writing to the collector of the port, who will proceed according to the laws in this chapter.

CHAPTER XIII.

THE DISCHARGING OF VESSELS.

ART. 65. I. To discharge merchandise the consignee of the ship must make a petition in writing; if he does not, then the captain, accompanied by two copies of the general manifest in the Spanish language, without stamps.

The captain will give a paper with each of the boat-loads of merchandise that he sends to land, expressing the marks and numbers of the packages that are sent; the guard or officer of the custom-house who is on duty will sign the same if in conformity; if not, then write on said paper any observations should it be necessary.

The discharge concluded, these papers will be compared with the manifest of the vessel and the book of the warehouseman, if the goods have been sent to the warehouse.

II. A. The mail steamers and others that have stated times for arriving and sailing have the preference in discharging when they bring merchandise, and can do the same in the hours the custom-house think favorable, immediately she arrives and has passed the inspection of the sanitary officer and captain of the port.

B. Always that the consignee or agent of the steamer guarantees to give the two copies of the manifest, which, in the Spanish language, the captain of said steamers ought to present; twelve hours are conceded to said captain to verify this.

C. Immediately the steamer comes to anchor and commences discharging, the custom-house is authorized to give the register for sailing, if so solicited by the consignee or agent, also giving permission to embark and to load the lighters with fruits and national effects that are free of duty; such lighters cannot go alongside the steamer until the commander of the guards makes his second visit and has seen that the discharge is terminated.

D. In these steamers, where neither the hatchways nor bulkhead are closed or sealed, the collector of the port will take particular care to have and maintain on board the guards or officers he may think necessary for proper vigilance, taking into consideration the capacity of the steamer and the destiny of the cargo she may bring.

ART. 66. (For important changes, see note 3, Appendix A.) I. The consignees of the cargo of a vessel have the faculty to rectify or make additions to their invoices during forty-eight hours, counting from the time the ship came to anchor, excepting the days in which the custom-house is closed, or in an extraordinary case where it was impossible to communicate with shore, giving the reasons for such rectifications and additions, and protesting at the port that they proceed legally and in good faith; this document is made in duplicate according to model No. 8.

II. If the rectifications and additions that are made in the invoices increase or decrease the duties, which are caused according to the invoice, up to ten per cent. is admitted, the duties will be liquidated in conformity without any extra duty.

III. The rectifications and additions that decrease the duty that ought to be, according to the invoice, in more than ten per cent., and will not be admitted, and the duties will be liquidated according to invoice without any fine.

IV. The rectifications and additions that increase the duties more than ten per cent. and not exceeding twenty-five per cent. will be liquidated with the extra duty of thirty-three per cent. on the amount that was over in quantity or quality of the merchandise, according to the declaration in the invoices.

V. The rectifications and additions that increase the duties in more than twenty-five per cent., and without exceeding fifty per cent., (they) will be liquidated with the extra duty of fifty per cent. in the amount that was over in quantity or quality of the merchandise, according to the declarations in the invoices.

VI. The rectifications or additions that increase the duties in more than fifty per cent. than that which is declared in the invoice will be liquidated by paying double duties just as if there had been no invoice at all.

VII. The rectifications or additions that change the kind or nature of the merchandise declared will be liquidated covering double duties same as if there had not been any invoice.

VIII. The calculation to determine the increase or decrease that is produced in the duties by reason of the rectifications or additions is not computed on all the merchandise contained in the invoices, but only on those which have been altered or increased.

IX. The rectifications or additions of the invoices presented by the consignee to the custom-houses are examined by them without admitting or refusing same definitely, which corresponds to the Secretary of the Treasury; for this reason the collectors of the ports will send by first mail such additions and rectifications numbered consecutively, and giving his opinion in each case. This does not impede the liquidation and payment of duties on the goods, considering as admitted rectifications or additions, the interested party giving a bond to the satisfaction of the collector for the payment of the difference when the result of the case is definite.

CHAPTER XIV.

THE DISPATCH OF IMPORTED MERCHANDISE.

ART. 67. I. The consignees of foreign merchandise are obliged to present in triplicate the permit of dispatch precisely in fifteen days after the vessel that brought the goods has discharged, yet from the commencement such permit can be presented.

II. In the permits of dispatch must be specified with exactitude the merchandise, with all the requisites, as in article 24 of this tariff, for the formation of the consular invoices.

Before commencing the dispatch each permit must be examined with the general

manifest, which the captain has presented, as well as the consular invoices that have been presented by the consignees.

III. Should the permit for dispatch not be presented in the 15 days, as mentioned in fraction I of this article, warehousing will be charged as follows:

A. After fifteen days, as referred to in fraction I of this article, without the consignee presenting his permit for dispatch, the merchandise must be taken to the warehouses.

The merchandise causes during the first ten days a warehouse fee of five cents each day for each package, for whatever class of goods it may contain, or whatever size it may be.

B. Should the twenty-five days pass, as noted in article 74 of this tariff, for the termination of the liquidation of the cargoes, without the consignees having asked for the dispatch of their goods, the warehouse fees are ten cents per day for each package during five days.

C. Passing the five days, as noted in the preceding paragraph, without the consignee having presented the permit for dispatch, the warehouse fees are fifty cents per day for each package.

D. If six months pass, counting from the time the vessel has concluded her discharge, and the dispatch of the merchandise has not been asked for, they will proceed at once to realize the same in conformity with the dispositions in the articles 61 and 62 of this tariff, and make effective the payment of importation as well as the warehouse duties that the merchandise have caused.

E. When the merchandise are not those that are dispatched in the warehouses, they will proceed in conformity with article 60 of this tariff, and make it effective to cover the duties of the importation without waiting the six months mentioned in the preceding paragraph.

F. Warehouse dues will not be collected on the goods that are detained by a judicial order or by an order of the collector, or for any other legal circumstance against the wishes of the respective owners.

ART. 68. I. After comparing according to fraction II, article 67, and finding that the permit, invoices, and manifests are in conformity, the dispatch of the merchandise can be made on the wharf or in the warehouse, whichever may be thought best.

II. Assisting in the dispatch is the appraiser, whose obligation is to take the measurement, weight, class, and value of the goods, so as to apply the corresponding duties in conformity with the classification of the tariff, and as ordered in article 21 of this tariff, also the collector whose duty it is to have a general vigilance over all the operation, more particularly by the application of the appraiser, as well also the commander of the guards, or the officer who is on duty in his stead.

III. The examining or revising of the merchandise must be done publicly; in consequence all persons who wish can be present.

ART. 69. I. Of each hundred packages, without the exception of those that contain goods free of duty, there can be opened and revised at the least ten, which are called indiscriminately by the collector, commander of the guards, and appraiser; yet, when there are motives of doubt respecting the measurement, weight, value, or class of goods, the examination can be extended to ten packages more; even the goods in all the packages can be revised if there is any foundation of doubt or suspicion that there is any intention to commit fraud. In the cases, as in fraction III of article 27 of this tariff, all the packages of the cargo can be opened and revised.

II. The efforts that the interested parties may make as to modifications in the quoted duties, in the dispatch of the merchandise, will not make it necessary to detain the operations of the custom-house.

III. When for any difference there continues a lawsuit before any of the tribunals, and the interested party wishes the dispatch of his goods before waiting the issue of said suit, there cannot be admitted by the custom-house any bond, only payment in money as a deposit, the custom-house reserving in these cases a sample of the goods or merchandise that have originated the difference.

IV. In case of any dispute respecting the application of the quoted duties between the importer of the merchandise and the custom-house, the corresponding duties will be covered according to the judgment of the collector, in the consideration that for any later decision, either judicially or administrative, that a restitution has to be made, which will be done, making the respective entry, which must be in conformity with the order of the Secretary of the Treasury.

ART. 70. I. The revision and dispatch of the merchandise being concluded, a liquidation of the duties will be formed, which will be satisfied by the payment in cash by the interested person, and if he wishes to take the same before such liquidation is concluded, a bond will be asked to the satisfaction of the collector; in case he cannot or does not wish to give bond, there will be left on deposit in the warehouse of the custom-house the part of the effects which the collector thinks of sufficient value to cover the amount of duties.

II. The collector of the maritime custom-houses can admit the bonds indicated for

the duties on special permits, or those for a ship when determined, or for those that are due by any importer during a definite time that does not exceed six months.

III. The bond named is made before the collector and cashier of the custom-house by persons who concur in the circumstances established by the laws to the satisfaction and under the responsibility of the collector. These bonds are kept in a book that is kept in the custom-house destined for that exclusive purpose.

IV. The bonds that were for receiving goods from the warehouses before the conclusion of the liquidation ought to be canceled in the act when the duties are paid.

V. The expenses that are caused by the revision, examining, dispatching, or liquidations are for account of the importer, in conformity with the laws, the same as those of the employés who intervened in the operations.

VI. The compulsory and economical action for the recovery of the duties due to the government, and as found mentioned in this article, can be recovered conjointly against the principal debtor and his bondsmen, and to this end the latter, in giving the bond, will renounce the benefits of proceedings by order and seizure.

ART. 71. In case the goods are damaged an abatement will be made in the duties in proportion to the demerit of the merchandise, saving the exceptions expresssed in this tariff. To qualify such abatement will unite the appraiser, commander of the guards, and two merchants named by the interested party from among four that have been named by the collector; if they are all in conformity or by majority of votes they will make the revision of the goods that have suffered detriment, making an act in writing which will remain in the custom-house as a proof of the corresponding entries, sending a copy to the secretary of the treasury.

The collector or the officer whom he may name to act in his stead has to be present to assist in such qualification, and in case of any dispute must decide the question, giving justice to all parties.

From this decision there is no appeal.

ART. 72. Inflammable materials, for them alone or by their contact with others, and the corrosives whose introduction into the warehouses of the custom-house might occasion a fire, will always be dispatched on the wharf, coming precisely in separate packages; not under any pretext can they be introduced into such warehouses.

ART. 73. Should there be found in the warehouses of the custom-house one or more packages that contain inflammable or corrosive materials, even in the smallest quantity, the collector will punish the consignee by fining him from $500 to $1,000.

CHAPTER XV.

THE ADJUSTMENT AND PAYMENT OF DUTIES.

ART. 74. I. The adjustment and liquidation of the duties of importation shall be done precisely in the term of twenty-five days, counting from the day on which the vessel that brought the merchandise concluded her discharge. During this time merchants can store their goods in the warehouses of the custom-house, or take them out after they are dispatched, subjecting themselves to the fixed regulations, as in the preceding chapter.

II. The liquidation being terminated, the payment of the duties must be made at once and in effective money.

ART. 75. Once the goods are dispatched from the custom-house, the duties cannot be returned under any motive, except in case of error in account. For this restitution, or to verify whatever other, must be proceeded with in respective order to the secretary of the treasury, leaving the collectors obliged to remit officially to said secretary the corresponding information, the steps he has taken, and for what cause he presents such information.

ART. 76. If the appraiser in revising the merchandise finds the result less in length, weight, measurement, or number than what is expressed in the permit of dispatch, the duties will be covered on what is expressed in such permits.

CHAPTER XVI.

THE TRANSIT OF FOREIGN MERCHANDISE IN THE TERRITORIES OF THE REPUBLIC.

ART. 77. I. The permission in transit is granted for the transmission of foreign merchandise through the territory of the republic, the frontier custom-houses near the coast, the ports near to the custom-houses of introduction, and *vice versa;* the ports of the republic nearest to the frontiers, the frontier custom-houses nearest to the ports of introduction.

II. The transit of foreign merchandise will also be permitted from one port to another of the republic under the preventions contained in this chapter, and the regulations and other dispositions which in each case, and under the circumstances the executive may dictate, prevent, and impede contraband; they can refuse wholly or partially such

permit in transit when, in their judgment, they think there is danger of any abuse of such privilege to defraud the exchequer, without necessity to give time nor to advise in anticipation.

III. The employés of the port or frontier custom-house that gives entry to goods in transit exercise in respect to them all the faculties that the laws concede, relative to the foreign merchandise destined for consumption in the republic.

The effects in transit can be examined when passing the national territory by the fiscal agents of the federal government.

IV. The merchandise in transit comes accompanied by corresponding invoices and manifests, with the certificate of the respective consuls, in the form and terms as expressed in articles 24 and 30 of this tariff, respecting foreign merchandise that is imported for consumption in the republic.

V. For the discharge and dispatch of the goods in transit, whatever may be their class or quantity, it is necessary to present in triplicate the respective petitions, as per model No. 10, to the custom-house so that the merchandise can be revised at once, practicing the corresponding operations to ask the "*guia*" or document of transit which must precisely go with the mentioned goods, which "*guia*" or document of transit must have fastened to it one of the copies of the petition.

VI. The foreign merchandise in transit pays, when the document of internation has been given at the port or frontier custom-house where it arrived, 5 per cent. in money of the duties of importation fixed in this tariff, and one dollar for each two hundred pounds gross weight. These duties are the only ones paid to the federal treasury of goods simply in transit, being free from all other additional and even municipal charges wherever the locality by which they are conducted.

VII. Foreign coffee transported through the national territory will not pay the duty of one dollar per package when the distance, crossed before leaving the republic, does not exceed 30 leagues.*

VIII. Goods transported go by the route designated in the "*guia.*" In case the conductors deviate from the route designated the goods and beasts and carts conducting them are confiscated.

IX. The persons introducing the effects in transit give a bond to the satisfaction of the collector of the respective custom-houses for the total amount of import duties which correspond to the goods, that in case when the time that was given has expired, and the respective return documents have not been presented.

The time being concluded for presenting the return document, as named in the original permit, without such presentation having taken place, then the bond will be made effective without any allegation whatever to the contrary.

X. The time for the presentation of the return document is one day for each three leagues that the goods have to travel to get out of the national territory, and ten days more for each piece of fifty leagues without exceeding the total time of three months, in the cases as in fraction I of this article, and six months as in that of II.

XI. When the merchandise in transit arrives at the port or frontier custom-house to leave the country, the packages will again be examined by the collector of the port, appraiser and commander of the guards, confronting the same with the petition that ought to be fastened with the transit document or pass, and finding everything in conformity they will give the return document.

XII. When in the revision that has to be made in the custom-houses where the goods in transit enter, appear differences in the documents that have come from the original port, or in dispatching in the custom-house from where sent, are differences in the documents extended by the transit, the penalties established in this tariff will be applied, considering the merchandise as a common or ordinary importation and under the same basis and quotas, and not in the part proportional to them as in the duties of transit.

XIII. The preventions contained in this chapter are not applied to the merchandise in transit by lines of railroads, whose owners have celebrated contracts with the Mexican Government that contain special stipulations as to transit of merchandise and passengers, which stipulations ought to be the same as the respective regulations that have been issued by the executive.

CHAPTER XVII.

OF EXPORT.

(See note 2, Appendix A.)

ART. 78. I. All the products and national manufactures, with the exception of Mexican antiquities, are free of duties when exported, which exportation continues pro-

* One league = about 2.6 miles.

hibited, and the gold, silver, precious woods and orchilla, which pay the duties, as follows:

II. Coined silver money in dollar pieces that go to the ports and frontier custom-houses, pay in the place of their extraction 5 per cent., and gold ½ per cent. (This has been abolished; it now pays at the place of exportation. See Appendix A.)

III. Small coins of gold or silver that go to the ports and frontier custom-houses for circulation, pay at exportation the 5 per cent. and the half per cent., as cited in the fraction above.

IV. Gold or silver in coin, in bullion, or in silver work that is sent to the ports and frontier custom-houses for exportation and circulation, travel with the respective pass that is issued and given by the chiefs of the federal treasury office, if the valuables leave the place where he resides.

The chief of the stamp office belonging to other places from where the money comes, or the chiefe ollector of the taxes in the federal district, if it comes from that place.

V. A. Silver bullion pays at the time of exportation 5 per cent. as duty of exportation, $4.41 per hundred on the same value as duty of coinage, and $2 for a piece that does not exceed 135 marks for revenue and assay.

B. Gold bullion pays at its exportation ½ per cent. on its value as export duty; 4.618 per cent. on the same value for coinage duty, and $2 that does not exceed 135 marks as a revenue and assay duty.

C. Silver bullion extracted from mines of the territory of Lower California pays as export a single duty of 5 per cent. on its value, calculated at $8 for one silver mark.

VI. Worked silver in any form shall pay 5 per cent. of its value upon exportation without prejudicing the duty for assaying and smelting, which must be paid.

VII. Foreign coined gold and silver shall not pay export duties, but carriers of such money are obliged to provide themselves with corresponding permits to carry said money to the ports.

VIII. Coined gold or silver, and silver wrought or in bullion, destined for export or circulation in ports and frontier towns, that travel without the permit provided for in fraction IV of this article, shall fall under the penalty of confiscation, remaining in all the rest subject to the conditions of the same article.

IX. A. (See Note 1, Appendix A.) Wood for construction and for cabinet work shall pay $1.55 per ton's weight when exported from a qualified port.

B. When export is made from a point on the coast not qualified, shall be paid in the custom-house which authorized the corresponding permit, $1.55 for each ton which the exporting vessel measures, without other deduction than which is occupied by national effects, previously loaded in the same.

C. The wood which is shipped upon the deck shall pay $1.55 per ton, besides that which it may have paid for that which the vessel measures under the penaltics, in case of exporting clandestinely, of the loss of the wood.

X. Archil shall pay an export duty of $10 per ton.

XI. Vessels, foreign and national, which arrive in ballast at ports of coasting trade with the exclusive object of loading stock or wood, are not obliged to solicit permits for loading from the maritime custom-house, having to bring in every case the corresponding manifest, according to the provisions in part III of article 31 of this tariff law.

XII. Vessels to which the preceding prevention refers cannot arrive at any bar or roadstead which is not the coast port mentioned in its manifest, except in case of necessity, in which case it shall proceed according to the preventions contained in Chapter X of this tariff law.

XIII. Seaport custom-houses shall prevent the carrying from the country, from whatever coast-point to the qualified ports, in vessels with or without decks, under the vigilance which they consider sufficient for avoiding fraud.

XIV. For the exportation of national fruits and effects, petitions in quadruplicate shall be presented, according to model No. 11, subjecting said exportation to the provisions in the general regulations of the maritime and frontier custom-houses.

ART. 79. National vessels, and in fault of them, foreign vessels, after having finished discharging in the port or ports to which they may have come destined, shall be able to pass to any coast point, even when there is no custom-house, even for coast-trade, with the object of loading national effects, having previously obtained the permission of the collector of the corresponding custom-house.

CHAPTER XVIII.

PASSENGERS AND THEIR BAGGAGE.

ART. 80. The following rules shall be observed for the landing of passengers and the dispatch of their baggage:

I. All foreigners that arrive at the ports of the republic can land as soon as the vessel comes to anchor, with their baggage, and when the landing is at night or at an

hour when the custom-house is closed, each passenger shall be permitted to carry with him a small bulk containing only clothing for use.

II. The examination of baggage shall be made with liberality, prudence, and moderation. The passengers shall not be detained more time than is indispensable for the examination of the packages which they bring, and if foreigners and not able to understand or speak the Spanish language, any of the employés who can interpret shall assist and advise them of the requisites and formalities to which they are subject.

III. Respecting clothing and personal adornments, the qualification of the quantity and quality which will not cause duty will be arranged by the just prudence of the collectors.

IV. The following other clothing and ornaments the passengers can import free of duties:

A. Two watches and chains.
B. One hundred cigars; 40 packs cigarettes.
C. One-half kilogram of snuff.
D. One-half kilogram smoking tobacco.
E. One brace of pistols, equipments, and up to 200 charges.
F. One sword.
G. One rifle, musket, or gun, equipments, and up to 200 charges.
H. One pair of musical instruments, except pianos or organs.

V. All effects not comprehended in the above concessions, and which are brought by passengers in small lots for any gift, will pay the duties fixed in the tariff, having to make a manifestation of them, specifying them, which shall be presented at the custom-house before verifying their dispatch.

VI. When used furniture comes in the equipage of the passengers account shall be taken of its damage in order to adjust the duties.

VII. If the passengers are artists of any opera company, dramatic, comedy or other, besides the general exceptions conceded in the previous articles, it is permitted them to introduce free of duty their property and necessary adornments with such as go to form part of their equipage and that are not excessive in quantity. When collectors think that there is abuse in the introduction they will form an invoice and collect 55 per cent. on the value, or appraisement, which will be done in the same form which is provided for goods that pay on their appraisement.

ART. 81. Collectors will make certain that there be distributed among the passengers before the dispatch of their baggage printed copies of this chapter in Spanish, French, English, and German, that they may be informed of the obligations to which they are subject.

ART. 82. Excepted to the provisions referred to in Article 80 are the equipages brought by foreign ministers accredited near the government of the republic, whose equipages will not be registered.

CHAPTER XIX.

INTERNATION.

ART. 83. Foreign goods which have paid import duties according to this tariff can be internated to other parts of the republic, subject to the provisions of the following articles.

ART. 84. I. In internating foreign effects the shipper shall present to the custom-house a duplicate petition according to model No. 9 (see Appendix A), one of which shall have the proper stamp according to fraction VIII, Article 106, of this tariff.

The duplicate does not need stamps.

The treasurer of the custom-house shall certify at the foot of same model that the import duties are paid or secure to be paid to the satisfaction of the collector, and in this permission shall be given the permit to leave, which shall be noted in the proper *garitas* (guard-house). This permit will cover the merchandise until its final destination.

II. The same petition shall be presented to the custom-house for the introduction of foreign effects which are free of duty, this fact being certified at the foot by the auditor.

III. The custom-house shall not dispatch documents of internation if those interested do not arrange the merchandise according to legal forms.

ART. 85. I. The document mentioned in the previous article being the evidence that the goods have paid the import duties, all foreign merchandise proceeding from any custom-house and travels without such document is subject to the payment of triple duties, and shall be seized when discovered, notifying the owner or conductor, so that he can choose the judicial or administrative proceedings in the terms provided by Article 91 of this tariff.

This notification shall be made to the office of the treasury in the state where the seizure was made by the chief of the respective section of the counter-guards, or to the principal tax office in the federal district.

II. The choice of methods of proceedings mentioned in the previous article must be made by the end of twenty-four hours after the receipt of the goods in the corresponding federal office, to the end that justice in the same may be established and followed, whether it be administrative or the case consigned to the district court for the choice of the interested, or in general, when bodily fines may be imposed, besides the triple duties.

III. Those that internate foreign merchandise by the frontiers of the republic are obliged to return to the custom-house the internation documents within the date which the collectors fix as prudent.

IV. The foreign merchandise referred to in the previous fraction can be examined by the counter guards or treasury officers while in transit, and federal employés making the examination shall note on the said documents.

V. At the place of final destination of foreign merchandise proceeding from the frontiers, the internation documents shall be viewed by the treasury officials in the capitals of states, by the chief collector of taxes in the federal district, and by the collector of stamp taxes in any other locality.

VI. The act of viewing these documents shall be verified by copying in a book.

The said documents shall be returned to the interested parties, certified that they have been copied with exactness, expressing the page of said copy, from which they have the right to give certifications that are asked by those interested.

VII. Goods introduced to be exported can be sold in whole or in part while in transit, provided the owner or person in charge of them goes before the companies, or sections of the counter-guard, or the respective treasury chiefs, which officers shall make the proper note on the internation documents, previously confronting the merchandise with the documents which cover them.

VIII. Merchants internating merchandise by the frontiers, and who without just cause do not return the internation documents named in fraction III of this article within the designated time, incur the penalty of a fine consisting of 50 per cent. of the import duties, to the end that proper bond be given to the satisfaction of the collector, and under the responsibility of this, before expediting the respective internation documents.

IX. The documents returned to the custom-houses shall be noted for this and filed as vouchers in the book of proceedings, to be remitted to the secretary of the treasury every four months, with a statement showing the documents expedited and those settled.

X. The packages whose internation is asked at the frontier custom-houses shall be presented to be crossed, in presence of the designated employé of the custom-house, with hempen cords solidly adjusted and fastened at the ends by a lead seal containing the name of the office and other things directed by the secretary of the treasury that he may deem advisable.

The seals are furnished by the custom-house, which will keep proper account of them. When the custom-houses have none of these seals, this fact will be stated by the collector upon the internation documents.

XI. Packages of foreign merchandise proceeding from the frontiers and which without just cause go on the road without the seals provided in the previous fraction, even when they carry the corresponding internation document, shall pay therefor 25 per centum of the proper import duty in the offices of the respective treasury chiefs, and the documents shall not be *vised* until the said duty has been satisfied.

XII. The fine fixed in the previous fraction for goods which go without seals is intended to find out without prejudice if they are contraband; being without said seal without just cause is sufficient reason for detaining.

CHAPTER XX.

CONTRABAND AND PENALTIES.

ART. 86. These are cases of contraband:

I. The clandestine introduction of goods by the coasts, ports, river-banks, or other points not qualified for foreign commerce.

II. The introduction of merchandise by the ports or frontiers without the documents provided in this tariff or in unusual hours, to avoid the intervention of the custom-house employés and the payment of duties.

III. The discharge, bringing in, or carrying goods to the ports and frontiers without the previous consent of the custom-house employés and without the formalities provided by this tariff.

IV. Falsifying the quantity or quality of goods which properly manifested pay more duties.

V. The omission of one or more packages of a vessel's cargo from the general manifest which the captain is bound to carry.

VI. The internation of goods without documents accrediting their legal entry and payment of the corresponding duties.

ART. 87. In the cases of contraband enumerated in the previous article, there are imposed the fines expressed by the following:

I. For the cases expressed in fractions I, II, and III of article 86 is imposed a fine of confiscation of all the goods, vessels, carts, teams, and mules, in or by which they are conducted, and the arms of the conductors when they make resistance.

II. For the cases specified in fraction IV of the previous article is imposed a fine of paying double duties, from those who made the importation of the effects conformable to this tariff, calculating the double duties on the quantity falsely manifested when it is on quality.

When in the importation of goods the falsifying is made at the same time there shall be applied only the penalty of double duties over the total of goods falsified.

When the difference in quantity that is found on examination of the goods does not exceed 3 per cent. of what is manifested in the respective documents, it shall not be considered a case of contraband, and in consequence there shall not be imposed a fine, the extra duties being paid as per the tariff.

III. For the case specified in fraction V of the previous article there is imposed a fine of paying triple duties to those of the tariff, on the merchandise contained in the package or packages brought outside of the manifest, in case their owner is in the port.

If nobody is present to reclaim them the collector shall consign the business to the district judge to determine what is advisable.

IV. For the case specified in fraction VI of the preceding article is imposed a fine of triple duties. If this penalty cannot be made effective by reason of the absence of the owner of the goods or for other reason, they are confiscated, also the trains (mules) and carts that carry them according to fraction I of this article consigning the case at once to the judicial authority.

V. Besides the previous money fines the authors of the contraband or fraud on the fiscal duties, the accomplices, receivers, and the employés that connive with any of the preceding, shall be punished with the corporal penalties which are expressed in the following:

VI. For the cases specified in fractions I, II, and III of article 86, the owners, conductors, captains, or whatever persons carrying the effects, if apprehended, the responsible ones shall be consigned to the judge of the proper district, in case that the amount of the duties that are discovered exceed $200, and in case of condemnation shall suffer five years' imprisonment and the publication of their names in the newspapers.

If it is proved that any established commercial house in the republic has made or aided contraband, besides the previous penalties applicable to their cases their signatures shall be nullified for all matters and transactions with the public treasury, and they shall not be admitted in any official or commercial act by government officers.

VII. In all the other cases expressed in article 86 shall be imposed a bodily fine of from two months to five years bodily imprisonment under the following basis:

If the amount of duties defrauded exceeds $200 without exceeding $1,000, it shall be imprisonment for six months; if it exceeds $1,000 without reaching $2,000, twice that time; above $2,000 and not reaching $3,000, triple that time, and so on successively, not exceeding the maximum of five years.

VIII. Collectors of customs shall only consign to the respective district judgeships those cases of fraud or contraband when the difference of the duties defrauded is more than $200 for a single article, and not those in which the sums of different parts that are found in the dispatch of the invoice exceed the amount of $200, in which cases shall be observed the disposition of article 91.

ART. 88. The importation of false money of whatever coinage shall be considered as indicating that the importer intends to commit fraud with it, and in consequence the responsible persons are to be apprehended and criminally judged, imposing the fines established by the common laws. In this case the collector of customs shall retain and render useless the money, rendering immediately to the proper judge the criminal or criminals without bail or other administrative recourse that can take place in other cases, according to this tariff.

CHAPTER XXI.

FRAUD AND THE PENALTIES.

ART. 89. These are cases of fraud:

I. Additions made by captains or consignees to the manifests and consular invoices, placing themselves in concurrence with the employés of the custom-house or counter-guard to falsify in quantity or quality the goods expressed in said documents.

II. Connivance with the employés to delay the fixed examination of the packages, or to pass the time to verify the dispatch, in order to falsify in quantity or quality of the merchandise.

III. Unloading or loading dutiable goods, verified with the consent or by the carelessness of an employé without having paid said duty.

IV. The internation of effects with fraudulent documents.

ART. 90. In the cases of fraud enumerated in the preceding article shall be imposed the fines expressed by what follows:

I. For that contained in fraction I of the preceding article is imposed a fine of paying double duties on the additional effects, the judge assigning the responsible persons and the others the payment of a fine of from $200 to $3,000, which the captain or consignee shall satisfy in his respective case.

II. Employés who become accomplices in the fraud referred to in fraction II of the previous article shall be dismissed from their offices and consigned to the proper judge in order to impose the punishment due to suffer according to the circumstances of the crime.

In this case the whole cargo shall be examined and the consignee or any other person who has procured the commission of the crime shall suffer a fine of from $500 to $2,000.

III. For the cases mentioned in fraction III of the previous article shall be imposed a fine of losing the goods, found on the route, loading or unloading, loaded or unloaded, and the apparent owner of the goods will pay a fine of from $500 to $2,000, according to the importance of the case.

The employé or employés complicated in this fraud shall immediately lose their positions and be judged by the respective tribunals for the crime of abuse of confidence. If the captain of the ship is accomplice in the fraud he shall pay a fine equal to that imposed upon the apparent owner.

IV. For the case marked by fraction IV of the previous article is imposed a fine of paying triple import duties, the abandonment of the employé who prepared the documents and of the chiefs who authorized them with their signatures or stamp (*vista buena*).

The employé connected with the act will be consigned to the proper judge to impose the corresponding fine according to the circumstances of the crime.

V. The employés found complicated with the mentioned crimes shall suffer the corresponding fines with the understanding that the penalty of imprisonment that is applicable to them shall never be less than double the time imposed upon the principal delinquent or delinquents of the contraband or fraud.

CHAPTER XXII.

JUDGMENTS.

ART. 91. I. Immediately when occurs a case of contraband, fraud, or fault of observance of what is provided in this tariff, which brings a fine that is not corporal, the collector shall require the interested ones that within the period of 24 hours they manifest in writing their choice of proceedings, before the collector or in the courts, to decide the case.

When the crime has a corporal punishment it shall be consigned to the proper district court.

Having made the choice it cannot be changed. Having elected administrative proceedings, the *expediente* (file of papers) shall be begun, giving first his written choice and afterwards the written reasons for the cause.

II. If the responsible party does not appear in the required time the case shall be taken judicially before the proper district judge.

III. When the interested party agrees with the fines imposed by this tariff, and renounces judicial trial, it shall not be done, and to form and prove the action, shall begin an act, which being written, signed by interested party, and certified by the collector and auditor, giving account to the secretary of the treasury, so that in view of these papers he can resolve the matter.

IV. When the decision of the adjusting office of the treasury is not limited to the rectifications of numerical errors or applications of the tariff quotations and imposes a fine, if the interested party is not satisfied, the proceedings shall follow the provisions of fraction I of this article.

ART. 92. The questions of contraband and fraud that follow judicial course shall be tried by the federal courts to the final point, and following with this the rules provided in the relative articles of this tariff and those that follow:

I. The goods having been seized, and the judge having received notice thereof, he shall proceed to summon for judgment to the parties; understanding as such, with respect to the guilty, the owner of the cargo, if he resides in the port, or the consignee, or he that brings legal power from either, or he that gives bond of *rato et grato*.

The judge shall also decide for the part of justice to the owner, or the captain or the supercargo of the vessel, to the owner of the beasts or carriages in which the effects are carried, or to the legitimate representatives of them, when to all or any of them the responsibility to which any corresponding penalty is attached may be proven.

In the summons shall be given a fixed time for appearing, and in fixing this shall be considered the distances of the places. If appearance is not made within this time they shall be declared (*rebelde*) not appearing in court, and the cause shall go on in the hall of the tribunal.

II. The judge of first instance trying the business of the treasury can be accused with statement of reason, once by each party, being entirely inhibited from again trying this cause, but the party thus accusing cannot repeat it in the cause.

III. The moment a judge is challenged and he accepts the challenge, if legal he shall immediately give notice of it to the judge who is to succeed him, stating the hour in which he does so, in order that his successor may immediately present himself to perform his functions, for which reasons all persons required in the judgment will remain united in the court-room until the judge who is to try the case shall present himself. If for just motives the judge should not present himself at the appointed day the judgment shall take place precisely on the day following, provided it is not a holiday, under the responsibility of the judge whose turn it is to acquit himself of this duty, who will become subject through delay to a suspension from office for a month by the just complaints of any contending parties or attorney-general for lacking in observance in this disposition.

IV. The judgment on confiscated goods shall take place in public and verbally, drawing, for the satisfaction of the parties, an act, which will contain the principal points of the judicial debate. The sentence shall be pronounced (being previously notified) within three lawful days at the latest, counting from the day the legitimate party appears in court, or by default in accordance to what has been stated in fraction I of this article.

Said term of three days will have no prorogue given for the passing of the sentence, unless a legal exception is found in the same and the proofs forwarded; should these be delayed on account of distance of places, or any other moral or physical impossibility, the judge may in this case postpone the sentence for the time he may deem strictly necessary.

V. In such places where there is no attorney-general, or in those where there is one who cannot concur to the judgment, his place will be taken by the collector or by the employé named by him.

VI. In the judgment of confiscated goods whose value does not exceed $500, the sentence passed in a court of first instance cannot be transferred to a superior court, and causes an immediate decree of execution; but the judge must, within five lawful days, send an extract of the judgment and decision to the judge of the court of second instance for his revision, which will reduce itself to certify if the proceeding is in accordance with this tariff; to demand the corresponding responsibility in case it manifests any violation of its rules, or having passed decision contrary to any given law.

VII. In case an appeal to a higher court should be interposed, if there be a right to do so according to law, the judge of the court of second instance must decide at the latest within twenty days after having received the proofs alluded to in the following fraction, having to instruct the relative judgment; but if the parties agree to have it verbal it must be executed thus—the attorney-general being heard verbally and the judge having to pronounce his decision within four lawful days.

VIII. The party considering itself injured by decision passed by the court of first instance must appeal the moment it is pronounced, or when he receives notification, should he not have been present at the judgment, the judge being obliged to give him within twenty-four lawful hours evidences of the acts and sentences that have taken place, the original proceedings remaining in the archives of the court.

IX. Twenty-four hours after having received proof of the sentence given by the court of first instance, the appellant must present them to the judge of the secondary court, if he resides in the same place; but should he be at a distance the appellancy will be altered by counting the number of days it will take to make the journey, allowing five leagues to each day.

In order to give fulfillment of the aforementioned, the court will take note of the hour in which the proofs were delivered to those whom they may concern.

X. If they should not appeal after the sentence has been passed, or if after having appealed the appellant does not collect his evidences within the time allowed in fraction VIII, or does not have recourse to the judge of the secondary court within the term mentioned in fraction IX, the sentence will be considered accepted, and will be put into execution.

XI. Judgment on confiscated goods will be admitted in a secondary court if their value exceeds $500, but not over $1,000, the decision of the secondary court causes a written decree either confirming or revoking the first, the judge being obliged, in all cases, to send within five lawful days to the tribunal of the third court the cause or an extract of the judgment, if it were verbal, for its revision and other effects mentioned in fraction VI.

If the value does not exceed $2,000 it will admit a third court, provided the decision of the second does not agree with that of the first, for in this case it would cause a written decree and does not give lien for a third court.

XII. In the appeals that according to law are interposed from a second to a third court, all the rules established in this article for transferring cases from the first to the

second court will be followed in the judgment of confiscated goods and all criminal incidents.

XIII. When, in judging any case of confiscation, there should result any criminal incident to which a different penalty is attached, the judge will consider it as a different case.

XIV. The judgment on criminal cases will not hinder the conclusion (of the confiscation cases going on) within the pre-emptory terms allowed in this tariff for their termination.

XV. The courts or tribunals will send to their respective custom-houses in the term of three days the proofs of the absolutory or condemning sentences issued by them in the judgment of confiscation. The collectors will send said proofs to the secretary of the treasury with the corresponding report.

XVI. The goods confiscated will be deposited precisely in the custom-house, from which they cannot be taken unless by previously paying the corresponding duties, but when parties having a share in goods confiscated are unable to pay said duties, unless allowed to alienate a part of their share, they shall only do so when collectors, after taking the responsibility, shall receive (to his satisfaction) the quantity of goods that will guarantee for double the amount of duties to be paid. In no case shall the goods seized be delivered to the participants, owners, or consignees until the sentence has been passed and a written decree of exception been received.

The goods left in deposit during the judgment of the case cause no duties for storage. Excepting from the above article, all articles liable to become corrupted, corroded, or inflammable, for which the court has to provide what it may deem just after hearing the parties.

XVII. The term allowed to interpose an appeal pleading or making void, which in the corresponding case may be brought up by the representatives of the treasury, will be fifteen days, counting from the moment the sentence is made known to the attorney-general and to the secretary of the treasury.

XVIII. The judges shall make a report to the secretaries of justice and treasury of all cases formed for infringement of rules of the tariff, sending also copy of sentence pronounced, which shall be published and sent to consuls of the republic in foreign countries, so that they shall have them published in the markets and public places of the countries where they reside.

ART. 93. I. In all judicial proceedings in courts of the first instance the collector shall have cognizance of facts, having a right to appeal when the decision is contrary to the interests of the public treasury. To this end the sentence should be notified to him.

II. When the collector is not present the auditor will have the same rights, as also the commander of the guards, when the seizure has been made by them or their order, and the commander of the counter-guards; they can present their documents on common sealed paper of the office without stamp, a lawyer's signature not being indispensable.

III. The employés acting as attorneys may intrust this power, when the judgment does not take place where they reside, to an employé holding the higher office in the federal treasury residing where the judgment is to take place, it being understood that where are simultaneously a treasury chief and a collector to the last named shall the power be intrusted; those acting as attorneys shall follow the instructions communinicated to them by the government in favor of the exchequer, and they will defend the same.

ART. 94. The cases of confiscation and fraud cannot last longer than four months in each court.

ART. 95. In the administrative judgment the following proceeding must be observed:

I. Once the administrative proceeding has been chosen, according to article 91, the auditor, or, if by legal impediment he could not come, the first or second officials will take his place, formulating the accusation of contraband or fraud against the owners or consignees of the goods; this accusation must in all cases be written, in order that those whom it may concern may answer in three days.

II. If the guilty party or the accusers wish to present some proofs, they are allowed eight days, which, in case of absolute necessity, shall be prolonged to fifteen, in which time all proofs offered by both parties and alleged to in the complaint and defense shall be received.

III. If the proof is testimonial the collector will name the day on which it will be received; on that day shall the witnesses referred to be examined in the presence of both parties.

The examination of witnesses shall take place in the same terms and with the same requisites and formalities used in common cases.

The declarations being written by a secretary taken from amongst the employés, and named by the collector.

The secretary will intervene in every one of the acts of the administrative proceeding.

IV. The testimony being completed, a summons shall be made, assigning six days to each one of the parties, that they make good proof, and for this purpose they shall be free to examine the judicial proceeding under suitable supervisions.

V. The last allegation having been presented, the parties shall be summoned for the definite decision, which the collector shall give within eight days, notifying the interested parties immediately.

VI. In cases having no proofs, the summons being answered, the case will be considered terminated, making it known, as also the citation for sentence; the collector will dictate his final resolution within the term given in the former fraction, which will be notifyed to both parties.

VII. If either of the parties should not be satisfied with the sentence, he shall verbally say so immediately, or by writing within three days. This term having passed without any of the parties making said manifestation, both parties shall be considered as agreeing, no other appeal being admitted.

VIII. In all cases of administrative proceeding, the collector will send the original judicial proceedings to the Secretary of the Treasury, keeping a copy and giving the interested parties notice the day they are sent.

In section 1 of the secretaryship shall be placed the judicial proceedings at the disposal of the parties for the term of ten days, which admits no prorogue, counting from the day received, so that the parties may allege by writing what concerns them, either personally or by persons named for that purpose.

IX. When the interested parties do not make use of the right assigned them in the preceding fraction, the secretary of the treasury will, after the expiring of the ten days given in the same, resolve the matter clearly, notifying the respective collector the resolution for its execution without admitting another appeal.

X. The administrative proceedings occasion no costs.

XI. In the administrative proceedings a fifty cent stamp shall be required from the interested parties on each sheet of common-sized paper of the writing and petitions made.

CHAPTER XXIII.

DISPOSITIONS OF CONFISCATIONS AND FINES.

ART. 96. Every inhabitant of the republic, there being no necessity of his or her name appearing in the proceedings, if he does not think it convenient, can give notice and incite the administrative, judicial, or military authorities, that they may seize the imported goods, orgoods sent into the interior by contraband; he may also denounce all fraudulent operations of the same kind that are to be committed. The goods once seized, shall be delivered to the competent authorities. Likewise every inhabitant of the republic has a right to seize in public roads, or cities foreign goods, either imported or sent to the interior of the republic by contraband, those who are in the performance of the privilege should seize any goods will acquire by this act a right to a third of the net proceeds of the goods, that are declared seized by competent authority.

The officials of the administrative, judicial, or military order required by any federal or local employé, or inhabitant of the republic to give assistance in order to pursue goods imported or sent to the interior as contraband, and who does not do so within the limits of his power shall be judged according to law for this refusal and for acts of positive complicity he shall have committed.

ART. 97. The person who gives the notice, referred to in the preceding article, has a right to a third of the net proceeds, after paying the corresponding duties to the public treasury, and the 2 per cent. destined to hospitals; provided said notice shall agree with what has been established in this tariff, the goods being positively declared seized or the fine paid.

ART. 98. I. The remaining value of the goods confiscated, after making the deduction mentioned in the previous article, will be divided into three equal portions; one shall be given to the accuser, the other to the party or parties who seized the goods, and the other shall be equally divided between the collector, auditor, and commander of the guards in case the confiscation has taken place in the custom-house by means of an administrative proceeding; but should the declaration have been made by the district court, half of the auditor's share shall be assigned to the attorney.

II. The ninth of the proceeds of the fine allotted to custom-house collectors will be divided into as many equal shares, as persons have performed this office during the proceedings from the moment the goods have been seized to the pronouncing of the final sentence, whether administrative or judicial.

III. The ninth, allotted to auditors of custom-houses when the proceedings are administrative, or half of the ninth assigned them when the proceedings take place in the district court, will be proportionally divided according to the basis given in the former fraction.

IV. The half of the ninth assigned to attorneys will in its case be divided amongst the persons who performed the office of attorney intervening in the proceedings.

V. The ninth, assigned to the commander or commanders of the guards, will be applied exclusively to the one engaged at the time of confiscation.

VI. The rights of appraisers of custom-houses to a part of the proceeds assigned to them by article 101st, of this tariff, are perfect the moment they make their observations at the time of dispatch.

VII. The rights of those seizing foreign goods, or those nationalized, to the parts assigned to them in fraction I of this article, are perfect the moment the goods are seized.

ART. 99. When the confiscation is made by a custom-house cutter the share assigned in the previous article to parties who seize the goods will be given to the crew; moreover the commander of the cutter is entitled to the ninth allotted to the custom-house guard.

ART. 100. When there are no accusers the parties who seized the goods are entitled, though they should be employés, to the share assigned in article 98, fraction I, of this tariff.

ART. 101. In confiscations made by appraisers, at the moment of dispatch, the collector and appraiser present at the revision shall be considered as parties seizing the goods; in cases where the confiscation takes place at the indication of the guard he shall be considered as one of the party.

ART. 102. I. In confiscations made by confronting the manifest with the invoice the six-ninths assigned to parties who seize the goods are thus divided: three to the collector or auditor that confronts the document, the remaining three being equally divided between the first officer and other officials employed.

II. When the contraband is discovered by the guards or private individuals in cities or on the roads without the intervention of either sea-port or frontier custom-houses or custom-house section, the proceeds of the confiscation declared by a sentence that gives place to a judicial proceeding if taken to the district court, or by administrative resolution of the secretary of the treasury, according to fraction IX of article 95, of this tariff, will be divided as follows:

A. Half the proceeds of sales of confiscated goods, beasts of burden and carts they draw, will belong to the federal exchequer in compensation of the respective duties of importation taking from this part the 2 per cent. for hospitals, expenses of proceedings, and others originated.

B. The other half will be distributed, without making any deduction, among the participants according to what has been disposed in this article, giving one-third to the denouncing party, the other to the party who seized them, and the other to the employés of the office of the federal treasury that received the goods to carry on the corresponding proceedings; the distribution of this third is made proportionately according to what has been demonstrated by this tariff.

C. The share corresponding to the party who confiscated the goods will be divided in equal shares among all who took part in seizing them without any distinction. If there has been no accusation the share allotted to the denouncing party shall be divided between those who seize it.

ART. 103. The distribution to participants in cases of confiscations and fines shall only take place after the office of the secretary of the treasury has forwarded the corresponding approbation to the respective office.

The proceeds of the fines are to be deposited with the secretary of the treasury and the goods in its warehouse.

ART. 104. The goods that are declared positively confiscated either by the judicial authority or by the officials who pursue the case in the administrative proceeding, if carried on in this mode, shall be delivered in classes to the participants, excepting the cases referred to in fraction II of article 102 of this tariff, the participants paying previously the respective duties, as also the 2 per cent. allowed to hospitals; the parties interested being at liberty to make the division as they may think more convenient.

ART. 105. In all cases of confiscation or fine, 2 per cent. of the net remainder will be assigned to the sustenance of charity hospitals in places having them; in case there should be none in the port it will be assigned to the hospital of the nearest place within jurisdiction of the state to which the port belongs.

CHAPTER XXIV.

STAMP LAW.

ART. 106. Stamps shall be used in custom-house business as provided by the following prescriptions:

I. In petitions for discharge of vessels coming from foreign ports, shall be used stamps to the value of $8.

II. In petitions for loading vessels destined for foreign ports, when carrying merchandise, shall also be used stamps to the value of $8.

III. When vessels clear in ballast the petition for clearance shall not require stamps.

IV. In petitions for loading or unloading vessels for coast traffic, shall be used stamps in the following proportions:

A. When the tonnage of the vessel does not exceed 50 tons, to the value of 50 cents.

B. Exceeding 50 tons, $2.

C. When sailing in ballast no stamps need be used.

V. Additions or rectifications of manifests of goods or of consular invoices that are presented to collectors of maritime and frontier custom-houses, are free of stamps.

VI. In the requests of petitions presented to collectors or chiefs of custom-house sections, or of the counterguards, shall be used stamps to the value of 50 cents for each page of ordinary paper.

VII. In petitions which are made by owners or consignees, for the dispatch of their merchandise on the importation as well as on their exportation, shall be used stamps to the value of 50 cents for each page of ordinary paper.

VIII. In each bond or response (?) executed by merchants before custom-house officers shall be used stamps to the value of 50 cents for each page.

IX. A. In the petitions for the internation of goods, if their value does not exceed $100, shall be used stamps to the value of 5 cents for each page.

B. Exceeding $100 in value twenty-five cents each page.

X. In petitions made for the dispatch or transport of goods in the coasting trade shall be used stamps to the value of 10 cents each page.

XI. In the acts of average referred to in article 71 of this tariff shall be used stamps to the value of 50 cents.

XII. Duplicates or triplicates of whatever documents used for comprobation in the dispatches of the custom-houses are free of stamps.

XIII. In the acts referred to in fraction III of article 91 of this tariff shall be used stamps to the value of 50 cents each page.

XIV. In the petitions which captains or supercargoes of vessels present to collectors of maritime custom-houses, to go to load national products at whatever point on the coast after having discharged their cargo, shall be used stamps to the value of 50 cents.

CHAPTER XXV.

LAW OF THE ZONA LIBRE (FREE BELT.)

(See note Zona Libre in Appendix B, p. 361.)

ART. 107. I. The foreign merchandise imported through the frontier custom-houses on the right bank of the Rio Bravo (Rio Grande) in the State of Tamaulipas qualified for commerce, for consumption and reciprocal commerce between the towns of Matamoras, Reynosa, Camargo, Mier, Guerrero and Monterey-Laredo,* shall only cause one and thirty-seven hundredths of the (regular) import duties, to be applied to the municipalities, according to article 19 of this tariff, and† one-half cent per pound of the gross weight of goods introduced.

II. Goods imported by these custom-houses and deposited in government or individual warehouses in the towns named in the preceding fraction only cause on their importation, when not internated to other towns of the republic, the municipal and weight tax as stated in said fraction.

III. Importers of goods to the Zona Libre shall present to the respective custom-house the consular documents provided in articles 24 to 30 of this tariff, when they are maritime imports or when the frontier imports are made in sail or steam vessels. For other importations that take place from the towns of the left bank of the Rio Bravo at the custom-houses thereof shall be obtained, from the respective Mexican custom-house, permit or permits previous to importation, with the requisites required by the rules of the custom-houses, whose permits shall be returned each month in a corresponding consular invoice and manifest.

IV. The foreign merchandise having arrived, and permit for which had been obtained at the custom-house where it was imported, the inspection shall be verified in entire conformity to the provisions of this tariff.

V. For the importation of foreign effects each one of the custom-houses on the right bank of the Rio Bravo qualified for commerce shall not permit more than one pass in some one of the fords of the same river, establishing in front of said ford a guard station.

VI. Goods leaving the localities mentioned in fraction I of this article for their reciprocal commerce, shall go exactly with *guia*, or written permit, and in those documents shall not be stated any way point, but only one as terminus, in which they are to be consumed.

VII. Consumption in the ranches within the jurisdiction of the towns named in

* More commonly called New Laredo—opposite Laredo, Texas.

† See note 2, Appendix B.

fraction I of this article shall be verified without payment of duties not exceeding in each remission of goods to said ranches the value of $30, and carrying their respective written permits, without which requisite they shall be confiscated.

VIII. Foreign goods imported to the Zona Libre shall pay on their internation (to points beyond the Zona Libre) the corresponding import duties, with deduction of those paid on their introduction for municipal and weight duties, being dispatched conformably to the provisions of this tariff.

IX. In all (things) that has no express exception regarding the Zona Libre shall apply the general dispositions of this tariff and rules of the custom-houses.

CHAPTER XXVI.

GENERAL PROVISIONS.

ART. 108. Collectors and employés of custom-houses, and counter-guards shall treat passengers, captains of vessels, and merchants, with due consideration without occasioning more delays than are indispensable to fulfill the provisions of this tariff.

ART. 109. When the quantities of provisions written in the list of the stores which captains or supercargoes must present according to article 32 of this tariff are found notoriously excessive, collectors of customs shall order the liquidation and payment of proper duties on the excess, considering the number of the crew and time needed for the return voyage of the vessel, permitting in the case expressed the captains to sell in port the excess of provisions.

ART. 110. Effects necessary for the use and conservation of the vessels, must be written in the list of stores, and if notoriously excessive the collector shall proceed as provided in the preceding article respecting ship stores.

ART. 111. If, of the ship's stores allowed by collectors, captains should desire to sell a part in the port they shall be allowed to unload, paying the proper duties fixed by this tariff.

ART. 112. Merchandise that from the quality cannot be comprehended in the preceding articles, cannot be admitted as ship stores, and to them shall apply the penalty corresponding to goods that come without consular invoice according to article 29 of this tariff.

When permission is asked to transfer ship stores from one vessel to another, for sales made by the captains, it shall be conceded, having paid the proper duties.

ART. 113. The laws of previous tariffs and the explanatory dispositions issued up to the date of this *arancel* (tariff law) shall not now apply or be in force.

Given in the National Palace of Mexico, November 8, 1880.

PORFIRIO DIAZ.
TORO.

APPENDIX A.

WEIGHT DUTY.

NOTE 1.—By the tariff of November 8, 1880, of which the preceding is a translation, the merchandise included in Chapter VI were free of duties.

By the executive decree of June 25, 1881, taking effect November 1 and 15, same year, a weight duty of from 50 cents to $1 on each 100 kilograms, gross weight, was imposed. This duty has in the translation been placed opposite the various classes.

By the same decree a similar duty was placed on all goods named in Chapter VII. This duty is placed opposite the articles in the right hand column, under a suitable heading.

Article 4 of this decree, that foreign effects not specified in the tariff (see Chapter VIII) shall pay an additional gross weight duty of 75 cents for 100 kilograms.

ART. 5. Packages contained in one permit which weigh nearly 100 kilograms shall pay duty for 100 kilograms.

ART. 6. When a package contains different articles, the weight duty on the whole package shall be computed at the rate of the one having the greatest weight.

ART. 7. This shall not apply to articles conceded free imported by railway franchises.

ART. 8. This fixes an additional duty on the kilogram *net* which is in the list under the former duty.

A similar duty of 3¼ cents on liquors in barrels is also given.

ART. 9. Woods for construction and cabinet work of all kinds, exported from the coasts or frontiers, shall pay, after October 1, 1881, besides the duties given in fraction IX of article 78 of the tariff, an additional duty of $1 each ton of a cubic meter.

ART. 10. The same woods from other countries passing in transit by the rivers and

ports of the republic, shall pay, after the same date, on their exportation, a single duty of $4.50 for each ton of a cubic meter.

This article does not apply to woods carried by railways having franchises with provisions as to this traffic.

ART. 11. Directs that these duties shall be given separate columns.

REGULATING EXPORTS OF SILVER AND GOLD.

NOTE 2.—A circular from the secretary of the treasury dated June 20, 1881, regulates and changes somewhat the law regarding the payment of export duties on silver and gold, or either in bullion, and adds duties on exports of copper with silver, lead with silver, mineral stones and powders, &c.

Chapter I provides that duties of export may be paid on *exportation* instead of as formerly being paid when leaving the place where produced for the coast, and the other articles of Chapter I give minute direction as to transit from interior towns.

Chapter II provides for paying duties on silver or gold bullion on exportation, with rules, &c.

Chapter III imposes a duty of 5 per cent. on the value on exports of copper with silver, with rules, &c.

Chapter IV imposes a similar duty of 5 per cent. on exports of lead with copper, giving regulations, &c.

Chapter V provides that mineral stones and concentrated mineral powder (dust) shall pay a similar duty of 5 per cent. on the value of silver they contain, with rules, &c.

Chapter VI provides a similar duty of 5 per cent. on exports of artificial sulphates of silver, with rules, &c.

NOTE 3.—By the law of December 14, 1881, which took effect three months after that date on the gulf ports, and six months afterwards on the Pacific coast, the following changes were made in articles 24, 25, 26, 27, 28, 29, and 66 of the tariff:

Division C of fraction IV of article 24 is changed by adding: Also shall be expressed the net weight of goods having different quotas contained in the same package when any of them pay by net weight, or when they are free of duties.

Article 27, I, provides that the fines provided therein shall be imposed if the error in the invoices is not declared in the proper time.

Fraction II provides that to incur the fines, the errors mentioned shall be data necessary for liquidating the duties, and also when the errors occur both in the copy of the consignee and that of the custom-house, or only in the former when the latter has no copy.

Similar errors in free goods will cause a fine of $10 for each fault.

Fraction III provides to incur the fines therein mentioned the ambiguity shall be such as to impede the precise classification, material, and nationality of the effects.

Article 28. I. For fault of any requisites contained in A of fraction IV of article 24, shall be imposed the fines provided by fraction III of article 27.

II. The fault of any requisites named by B, C, D, or E of fraction IV of article 24, shall be imposed the following fines:

A. Not manifesting number of pieces, pairs, dozens, or thousands of goods, paying by such designations and not giving values of invoices of goods, paying by invoice or appraised value, will incur an overcharge of 30 per cent. of the corresponding duties.

B. Omitting net weight of fabrics that pay by net weight, an overcharge of 50 per cent.

C. In other effects paying by net or gross weight, lack of respective weights, 25 per cent.

D. When the invoice does not contain all the data provided by D of fraction IV of article 24, and it is thereby difficult to calculate duties payable by measure, an overcharge shall be made of 50 per cent. on the duties.

E. When the class of goods is not clearly stated so as to determine the proper duties and various quotas fixed by this tariff for goods of those classes an overcharge is made of 25 per cent. of the duties.

III. If the interested party take exception to these fines imposed by the custom-house, the question as to these *being a fault* may be decided judicially, but the amount of the fine shall be decided by the custom-house within the maximum provided.

ART. 29. II. This fraction is changed so that in case some of the invoices are lost or delayed goods may be compared and dispatched with the one received by the custom-house or a certified copy of the one received by the secretary of the treasury, having given satisfactory bond to produce the invoice mentioned in fraction II of article 40.

III reaffirms fraction II of article 29.

IV. By this the fine provided in fraction III of article 29 is changed from $5 to $100 to $10 to $100.

V. By this the fine to be inposed is conditional upon the non-correction by addition to the invoice within the due time.

ART. 66. I. By this the limit for additions or corrections to invoices is changed from forty-eight to seventy-two hours.

II. By this the changes in invoices may increase or decrease the import duties 15 per cent. instead of 10 per cent., as in the tariff.

III. Only changes the expression of 10 per cent. to 15 per cent.

IV. This is made to read 15 per cent. instead of 10 per cent., 30 per cent. instead of 25 per cent., and the fine of 33 per cent. is reduced to 10 per cent.

V. This is made to read 30 per cent. instead of 25 per cent., and while 50 per cent. is unchanged, the fine is changed from 50 per cent. to 20 per cent.

VI. The additions or corrections that augment duties 50 per cent. more than the amount declared shall cause an overcharge of 30 per cent. instead of the fine previously imposed.

VII. Additions or rectifications that *completely* change the class or nationality of goods shall cause an overcharge of 75 per cent. on those thus declared.

VIII. No change.

IX. This is changed by the *addition* of the following:

1. The rectification and corrections in faults of ambiguity named in fraction III of article 27, and the faults to which fraction I of article 28 refers, shall be liquidated by an overcharge of 80 per cent. upon the amount of the duties, without prejudicing the examination of all the packages to which the additions, &c., refer.

2. The rectifications and additions made in the cases referred to by A, B, C, D, and E of fraction II of article 28 shall be considered by the custom-houses, imposing only 5 per cent. of the penalties therein provided in such cases.

APPENDIX B.

MODEL NO. 1.—ARTICLE 24 OF TARIFF.

Invoice of the following goods which he that subscribes remits in the vessel [here state nationality, class, and name of ship], *Captain* ——— ———, *consigned to* ——— ———, *of the port of* ———, *of the Mexican Republic, where the vessel is destined.*

Marks of each package.	Number of each package.	Number of packages, in figures and letters.	Classes of packages.	Gross weight of each package, in figures and letters.	Total net weight of that which pays by net weight, in figures and letters.	Total measure of length of those textures that pay by length, in figures and letters.	Width of those textures, in figures and letters.	Number of pieces of those that pay by piece, in figures and letters.	Material, class, and name of the goods.	Where the goods were produced.	Cost of goods that pay by an invoice value or on appraised value.

Date: ———.

Signature of shipper: ——— ———.

NOTE.—Under this form exactly shall invoices be formed, specifying each and every package that are remitted by them. The sum of the total number of packages shall also be expressed by letters.

MODEL NO. 2.—ARTICLE 30 OF TARIFF.

General manifest of the goods ——, *destined to the port of* ——, *of the Mexican Republic, brought by the captain,* —— ——, *who subscribes himself a citizen of* ——, *in the vessel* [here give nationality, class, name, and tonnage of vessel] *consigned to the house of* ——, *established in said port* [or to the said captain or supercargo].

Marks and countermarks.	Numbers.	Total gross weight of each package, in figures and letters.	Number of packages, in figures and letters.	Classes of packages.	General class of merchandise.	Shippers.	Consignees.
J. L. T. M. P.	1 to 10	1 (one) English quintal.	10 (ten)	Barrels.....	White wine.	Name.	Name.
	1 to 10	1 (one) English quintal.	10 (ten)	Bales of ordinary size.	Cotton textures.	Name.	Name.

Here the name of the port and date.
Signature, with protest of the captain that he has no goods in his vessel, and that he comes with intention of legal commerce in the republic.

NOTE.—Under this exact form must be formed each ship's manifest, specifying each and every package, after their class. The total number of packages shall also be expressed by letters.

MODEL NO. 3.—ARTICLE 32 OF TARIFF.

Notice that the captain subscribing gives to the custom-house of this port of the baggage that the passengers have whom he has brought on board the ship ——, *coming from* ——.

Number of packages.	Classification of packages.	Names of the passengers.	Nationality of them.

Date: ——. Signature of captain: —— ——.

MODEL NO. 4.—ARTICLE 32 OF TARIFF.

Notice that the subscribing captain gives to the custom-house of this port of the residue o stores on board the ship ——, *under his command* ——,

Number of packages.	Class of the effects.	Weight or measure of them.	Value.

Date: ——. Signature of captain: —— ——.

MODEL NO. 5.—FRACTION I OF ARTICLE 37 OF THE TARIFF.

Rectification (or addition) of manifest.

To the collector of this maritime custom-house:

As captain or supercargo of (name of vessel) this day entered in this port in exercise of the right given me by the tariff in force, I make the following rectifications (or additions): —— ——

I request you to order the necessary notation to be made protesting that I proceed legally and in good faith.

Date: ——. Signature of captain or supercargo: —— ——

Here the custom-house shall place the day and hour of presentation, noting if or no the additions or rectification is deemed admissible, expressing the reason therefor.

Signature of the collector: —— ——.

Signature of auditor: —— ——.

A copy. Auditor's office of the maritime (or frontier) custom-house of ——.

Date: ——. Signature of auditor: —— ——.

MODEL NO. 6.—ARTICLE 38 OF TARIFF.

Consular certification on manifests or invoices.

The preceding manifest (or invoice) numbered —— was presented in —— pages (in figures and letters) by —— —— (name of captain or shipper), containing —— packages (figures and letters).

Date, signature of consul, and seal of office.

This certification to be written at the foot of the respective document.

MODEL NO. 7.—FRACTION II, ARTICLE 40 OF TARIFF.

Consular certification in cases of loss of invoices.

Consulate, vice-consulate, or commercial agency of the United Mexican States in——

The subscriber, —— ——, certifies: That according to what is written on pages —— of the registry book of invoices of this ——, Messrs. —— —— presented for legalization, dated —— —, an invoice recorded with the number ——, containing —— packages embarked on the vessel ——, captain —— ——, on the voyage of (date) which were remitted to the port of ——, consigned to Messrs. —— ——.

And on petition of the interested, who have manifested having lost the said invoice I grant the present, having previously informed them that this certification does not free the consignees from the penalty which is incurred under the law from fault in the dispatch of the effects and in the copies of the same invoice which may be caused in the respective custom-house, remitted directly by this consulate, vice-consulate, or agency.

Date: ——.

[SEAL.] Signature: —— ——.

MODEL NO. 8.—FRACTION I, ARTICLE 66 OF TARIFF.

Citizen collector of the maritime custom-house:

Between the period of the law, we make the following addition (or rectification) of the consular invoice No. ——, that covers (*ampara*) —— packages of merchandise received by the steamer ——, captain —— ——, arrived at this port ——.

Marks.	Numbers.	Numbers of packages.	Invoice says.	Should say.
P. C.	1 30	30	Thirty sacks cacao.	Cacao carúpano.

I protest (or we protest) in good faith.

Date: ——. Signature of importer: —— ——.

Here the custom-house shall place the date and hour in which the addition (or correction) was presented, and if it is or is not admissible; giving their reasons.
Signature of collector: ———.

Signature of auditor: ——— ———.

Is copy. Auditorship of the maritime custom-house of ———.
Date: ———. Signature of auditor: ——— ———.

MODEL NO. 9.—FRACTION I, ARTICLE 84 OF TARIFF.

Citizen collector of the maritime custom-house of ———:

Be pleased to permit the internation of the following effects which by ——— I remit to ——— to the consignation of ———.

Numbers.	Marks.	Number and class of packages.	Merchandise.	Quotas.	Value of the duties.	Importing vessel.	Date of arrival.	Page of dispatch book.	Consignee.
1 10	M.D.	10 (ten) bales.	Woolen cassimere with 2,000 square meters.	At $1.40 the square meter.	$2,800	French str. "France."	Mar. 8		

Ten bales, weighing, gross weight, 600 kilos.
Custom-house seal.
Date: ———. Signature of the interested: ——— ———.
Corresponding import duties paid (or secured to be paid to the satisfaction of the auditor).
Signature of auditor: ——— ———.
Pass to its destination.
Signature of collector: ——— ———.
Seal of the guard (gate) by which it leaves.
Correct and note taken.
Signature of guard: ——— ———.

MODEL NO. 10.—FRACTION V, ARTICLE 77 OF TARIFF.

Petition for discharge and transit.

Citizen collector:

Be pleased to permit the discharge and authorize the transit of the following effects which consigned to the subscriber have arrived in (name vessel) captain ——— ———, which proceeding from ———, cast anchor in this port the —— of ———, 188-.*

Marks and numbers.	Packages.	Designation of the merchandise and quantity of each, figures and letters.	Reduction to Mexican weights and measure.	Quota of the duties.	Values of the tariff duties.	Five per cent. for transit.

Seal of office: ———.
NOTE.—To be signed by the auditor and vised by the collector. Five per cent. of transit for transit paid and bond given for total import duties according to tariff.

* When referring to goods brought to any frontier custom-house to come to Mexican territory, it shall be stated when they come, who has been their conductor, the date of their arrival and other specifications written in ruled columns.

MODEL NO. 11.—FRACTION XIV OF ARTICLE 78 OF TARIFF.

Petition for embarkation.

Citizen collector:

Be pleased to permit the embarkation of the following effects, which in the ship (name) captain ——— ———, the subscriber remits to (name of port).

Marks and numbers.	Number of packages and their class.	Minute account of the produce and effects.	Value.

NOTE.—In order that no misunderstanding of the foregoing eleven forms may result from translation, they are herewith published in the original Spanish.

MODELO NO. 1.—CORRESPONDIENTE AL ART. 24 DEL ARANCEL.

Factura de los siguientes efectos, que el que suscribe remite en el buque———[aqui se determinará la nacionalidad, clase y nombre del buque] *su capitan*——— *á la consignacion de*———*del comercio del puerto de*———, *de la Republica Mexicana, para donde se dirije el buque.*

Marcas de cada bulto.	Número de cada bulto.	Número de bultos, en guarismo y letra.	Clases de los bultos.	Peso bruto de cada bulto en guarismo y letra.	Total peso neto de lo que debe pagar por peso neto, en guarismo y letra.	Total medida de longitud de los tejidos que deben pagar por medida en guarismo y letra.	Ancho de los tejidos en guarismo y letra.	Número de piezas de lo que debe pagar en pieza, en guarismo y letra.	Materias, clase y nombre de las mercancías.	Procedencia originaria de las mercancías.	Costo de las mercancías que deben pagar sobre valor de factura ó sobre aforo.

Fecha: (Firma del Remitente.)

NOTA.—Bajo este orden se formarán precisamente las facturas, espécificando todos y cada uno de los bultos que bajo ella se remitan. La suma del total número de bultos, se expresará tambien por letra.

MODELO No. 2.—CORRESPONDE AL ART. 30 DEL ARANCEL.

Manifiesto general de las mercancías que, con destino al puerto de ——— de la República Mexicana, conduce el capitan ——— que suscribe, ciudadano de ——— en el buque [aquí se determinará la nacionalidad, clase, nombre y toneladas que mida el buque], *consignado a la casa de ——— establecida en el referido puerto* [ó al mismo capitan ó sobrecargo.]

Marcas y contramarcas.	Números.	Peso bruto total decada bulto, en guarismo y letra.	Número de bultos en guarismo y letra.	Clase de los bultos.	Clase en general de las mercancías.	Remitentes.	Consignatarios.
J. L....	1 10.	1 (Un) quintal Ingles.	10 (Diez.).	Barriles.	Vino blanco.	N. N.	N. N.
T.....				Tercios de tamaño comun.	Tejidos de algodon.		
M. P...	1 á 10.	1 (Un) quintal Ingles.	10 (Diez.).			N. N.	N. N.

Aquí el nombre del puerto y la fecha.

Firma, con protesta del capitan, de no tener ningunos otros efectos en su buque, y que viene con la intencion de comerciar legalmente en la República.

NOTA.—Bajo este orden se formará precisamente cada manifiesto de buque, especificando todos y cada uno de los bultos, sean de la clase que fueren. La suma del total número de bultos se expresará tambien por letra.

MODELO No. 3.—CORRESPONDE AL ART. 32 DEL ARANCEL.

Noticia que el capitan que suscribe da á la Aduana de este puerto de los equipajes que tienen los pasajeros que ha traido á bordo el buque ——— procedente de ———.

Número de bultos.	Clasificacion de bultos.	Nombres de los pasajeros.	Nacionalidad de estos.

Fecha ——— Firma del capitan ——— ———

MODELO No. 4.—CORRESPONDE AL ART. 32 DEL ARANCEL.

Noticia que da el capitan que suscribe á la Aduana de este puerto, del sobrante de rancho á bordo del buque ——— de su mando ———.

Número de bultos.	Clase de los efectos.	Peso y medida de ellos.	Valores.

Fecha ——— Firma del capitan ——— ———

MODELO NO. 5.—CORRESPONDE A LA FRAC. I DEL ART. 37 DEL ARANCEL.

(Rectificacion (ó adicion) de manifiesto.

Al administrador de esta aduana maritima:

Como capitan ó sobrecargo de (tal buque) entrado hoy en este puerto, en ejercicio del derecho que me concede el Arancel vigente, hago las siguentes rectificaciones (ó adiciones): ——— ———

Suplico a vd. mande hacer la debida anotacion, protestando proceder con legalidad y buena fé.

Fecha: Firma del capitan ó sobrecargo: ——— ———.

Aqui pondrá la aduana la fecha y hora de la presentacion, anotando si considera ó no admisible la adicion ó rectificacion expresando las razones que tenga para ello.

Firma del admi. istrador: ——— ———.

Firma del contador: ——— ———.

Es copia. Contaduria de la Aduana maritima (ó fronteriza) de ——— ———.

La fecha: ———.

Firma del contador: ——— ———.

MODELO NO. 6.—CORRESPONDE AL ART. 38 DEL ARANCEL.

De certificaciones consulares en manifiestos y facturas.

El precedente manifiesto, numero tantos (ó factura numero tantos), presentado en —— fojas (en guarismo y letra) por ——— ——— (aqui el nombre del capitan ó remitente) contiene —— bultos (en guarismo y letra).

Fecha, firma del cónsul y sello del consulado.

Esta certificacion deberá escribirse al pié del documento respectivo.

MODELO NO. 7.—CORRESPONDE Á LA FRAC. II. ART. 40 DEL ARANCEL.

De certificacion consular para los casos de extravio de facturas.

Consulado, vice-consulado ó agencia comercial de los Estados Unidos Mexicanos en ——— ———

El infrascrito ——— ——— Certifica: Que segun consta á fojas —— del libro de registro de facturas de este ——— los Sres. ——— ——— presentaron para su legalizacion en fecha ——— ——— una factura que se registro con el numero —— conteniendo —— bultos emarcados enel buque ——— suc apitan ——— ——— en el viaje de (aqui la fecha) los cuales remitieron al puerto de ——— consignados a los Sres. ——— ———.

Y á pedimento de los interesados, que han manifestado haberse extraviado la factura de que se trata, expido la presente, habiendoles antes advertido que esta certificacion no exime á los consignatarios de las penas en que incurran segun la ley por faltas que se encuentren en los despachos de los efectos y en los ejemplares de las mismas facturas, que deben obrar en la aduana respectiva, remitidos directamente por este cónsulado (vice-consulado ó agencia).

Fecha: ———. Firma: ——— ———.

[SELLO.]

MODELO NO. 8.—CORRESPONDE A FRAC. I, ART. 66 DEL ARANCEL.

C. Administrador de la Aduana maritima:

Dentro del termino de la ley, hacemos la siguiente adicion (ó rectificacion) á la factura consular número —— que ampara ——— bultos de mercancias recibidas por vapor ——— capitan ——— ——— llegado á este puerto ———.

Marcas.	Números.	Num. de bultos.	Dice la factura.	Debe decir.
P. = C.	1	30	Treinta sacos cacao.	Cacao carúpano.
.....	30	.....	.....	.....

Protesto (ó protestamos) de buena fé.
Fecha: ———. Firma del importador: ——— ———.

Aqui pondra la Aduana la fecha y hora en que fué presentada la adicion (ó rectificacion) y si es ó no admisible, expresando sus fundamentos.
Firma del administrador: ———. Firma del contador: ———.
Es copia. Contaduria de la aduana maritima de ———.
Fecha: ———.
Firma del contador: ——— ———.

MODELO NO. 9.—CORRESPONDE A FRAC. I, ART. 84 DEL ARANCEL.

C. administrador de la aduna maritima de ——— :

Sirvase vd. permiter la internacion de los siguientes efectos que con N. N. remito á ——— á la consignacion de n. n.

Marcas.	Números.	Numero y clase de los bultos.	Mercancías.	Cuotas.	Importe de los derechos.	Buque importador.	Fecha de su arribo.	Núm. de la de despacho.	Consignatario.
M. D.	1 10	10 (diez) tercios.	Casimir de lana con 2,000 metros cuadrados.	á $1.40 es metro cuadrados.	$2,800 00	Vapor francés "France."	Marzo 8.	....	N. N.

Diez tercios pesando, bruto 600 kilos.

Fecha y firma del interesado ——— ———.

Sella de la aduana.
Pagó los derechos de importacion correspondientes (ó los aseguró á satisfaccion del contador).
Firma del contador: ——— ———.

Pase a su destino.
Firma del administrador: ——— ———.

Sello de la garita de salida.
Cumplido y tomado razon.
Firma del celador: ——— ———.

MODELO NO. 10.—CORRESPONDE A LA FRAC. V, ART. 77, DEL ARANCEL.

Pedimento de descarga y transito.

C. administrador :

Sirvase vd. permiter la descarga y autorizar el transito de los siguientes efectos que a la consignacion del que suscribe, han llegado en (tal buque) su capitan ——— ——— que procedente de ——— fondeo en este puerto el —— de ——— de 188—.

Marca y número.	Bultos.	Designacion de las mercancías y cantidad ——— de estas en letra y núm.	Reduccion al peso y medida Mexicanas.	Cuota de los derechos.	Importe de los derechos de arancel.	Cinco por ciento de transito.

Sello de la oficina :———

NOTE.—Que firmará el contador visada por el administrador. Pago el cinco por ciento de transito y afianzó el total de derechos de importacion, conforme al arancel.

Cuando se trate de efectos que lleguen á alguna aduana fronteriza para pasar por el teritorio Mexicano se expresará la procedentia de ellos, quien haya sido el conductor, la fecha de la llegada y las demas especificaciones que constan en las casillas.

MODELO NO. 11.—CORRESPONDE A FRAC. XIV, ART. 78, del ARANCEL.

Pedimento de embarque.

C. administrador:

Sirvase vd. permitir el embarque de los siguientes efectos que en el buque (aqui su nombre) su capitan N., remite el que suscribe para (aque el nombre del puerto.

Marcas y numeros.	Num. de bultos y su clase.	Pormenor de los frutus y efectos.	Su valor.

NOTE 1. *The Zona Libre limits.*—The Zona Libre is a narrow strip along the Rio Grande from the mouth to a few miles above Nuevo Laredo and back from the river not to exceed 25 miles, nor in any case beyond the State line of Tamaulipas.

Ports of first entry.—The ports of first entry are now Matamoros, Camargo, Mier, Guerrero, and Nuevo Laredo.

Population.—The estimated population of the Zona is about 50,000.

For further information as to the Zona Libre see my report published in Consular Monthly Reports No. 5, for March, 1881, and my No. 224, of January 27, 1882.

NOTE 2. In this report no attention has been given to the law of Potazgo—toll or duty on native products, which obtains in the federal district and in Lower California.

Nor have I been able to collect sufficient data to properly show the various local municipal toll duties on foreign merchandise. I am informed that all such laws are unconstitutional and should not be enforced. Yet in this State such laws have been approved by the legislature for certain of the cities, and may or may not be now enforced. In this city there is none at present. In one city in this State the law was approved by the legislature, is unrepealed, but is not now enforced.

In other cities of this State and in several cities in the interior such laws are said to be now enforced.

Indeed, while I have not seen a copy of the laws which are in force in Monterey, Zacatecas, and other interior cities, yet I have seen statements of accounts rendered to merchants in this city in which this local tax has gone as high as 12½ per cent. of the full Mexican tariff. In others the amounts paid were considerably less.

I am also informed that these laws are not fully enforced in all cases, that some houses pay less, others pay in full, and others again pay nothing.

From the nature of such laws it will be seen that, while they are not stable and uniform enough to allow of their introduction in such a report as this, that they are nevertheless of considerable importance in matters of local traffic.

NOTE 3.—For further information which will be of great importance to American dealers in Mexican trade, I refer to the report by Dr. S. T. Trowbridge, late United States Consul at Vera Cruz, published in volume 2, page 835, commercial relations of 1879. I would particularly call attention to Dr. Trowbridge's remarks under the heads "Ambiguity of the Tariff Law," "Advice to American shippers," and the whole of the remainder of the report. It has of course been modified in some particulars by the new tariff, herewith translated, but with that kept in mind I consider it of great value and as applicable to-day as then.

NOTE 4.—In a report from the United States consul, David Turner, esq., at La Paz, Mexico, dated December 10, 1880, and published in the Monthly Consular Reports, No. 6, April, 1881, in paragraph 4 is mentioned another serious inconvenience to shippers. I quote the first part of the paragraph: "An invoice which might be deemed correct by a Mexican consul, and *might pass one custom-house*, will very likely be considered all wrong at another custom-house, and be subject to heavy fines and penalties.

I have italicised the particular point to which I wish to call attention.

As stated there, goods may pass one custom-house and go clear through to the interior destination, and then be classed as something essentially different, of course with higher duties, and cause the corresponding fines, double duties, and annoyances.

In one case which came under my observation lately, the importer took the decision of this custom-house and paid duties in good faith, only to cause the receiver of the goods in Saltillo double duties, &c., from the different classification of that office.

SUPPLEMENTS TO THE MEXICAN TARIFF.

SUPPLEMENT No. 1.

CORRECTING FOREGOING REPORT.

On March 22 I inclosed with my dispatch No. 234 a translation of all tariff laws, &c., in force in Mexico. March 1, 1882, I took particular pains to get, on three occasions, a declaration from this custom-house that I had each and every law in force.

Since that date, about 5th instant, learn of new law laying tax of 2 per cent. on import duties and an additional tax on vessels. Said law was published June 1, 1881, and took effect November 16, 1881, but this custom-house had no knowledge of it until about April 5, instant.

I have borrowed and copied the law from the Diario Oficial, and inclose translation of same with an explanatory note.

Also send a note to be introduced after the introductory note in my translation sent with my No. 234:

Suggestions as to references; provisions of the law.—This custom-house now enforcing collection for all importations made from November to April. Merchants will protest grounds.

Am greatly annoyed that so remarkable a mistake on the part of this custom-house should make the translation lately sent incomplete, but I took every precaution to prevent such an occurrence.

Referring to my dispatch No. 234, dated March 22, 1882, I have the honor to report a very extraordinary circumstance.

With that dispatch I inclosed a translation of the tariff laws and rates of duty of Mexico in force March 1, 1882.

In the preparation of the translation I used two copies of the "Arancel" of 1880 similar to those in use in this custom-house. I also obtained from this custom-house all circulars, laws, and *aclaraciones* (explanations) sent to that office since the publication of the "Arancel."

On three several occasions Mr. Guadalupe Fernandez, the auditor (second officer) of the custom-house, distinctly assured me that I had every law, circular, or explanation then in force.

As I was unable to purchase these circulars, Mr. Fernandez kindly gave me two (another of the three I borrowed), with my only copy of the Arancel, all of which I mailed to the Department, and advised you thereof in my dispatch No. 237, dated March 30, 1882.

Early in this month I was inquired of by a broker of this city if I knew anything as to a new tax of 2 per cent. on duties. I said that I did not; but by inquiry at the custom-house learned that they had lately been called to account by the treasury department in Mexico for not collecting the duty.

It seems from what Mr. Fernandez, above named, informs me, that the law was published last May. It did not emanate from the treasury department, but from that of public works, colonization, &c., and was overlooked by the customs authorities, who are not supposed to be subordinate to that office. They never received any notification as to it until they were reproved for not collecting it.

I have at length succeeded in borrowing a copy of the Diario Oficial

containing the law, and made a copy thereof, a translation of which, with an explanatory note, is inclosed herewith.

It is very important that these should be incorporated with my translation, and the Department will be able to determine how they should be added.

It seems to be a most remarkable circumstance that such a law passed nearly one year ago, and published in the Diario Official of June 1, 1881, should not be known or enforced in the third custom-house of the republic. The law itself does not state when it shall take effect, but I am informed by Mr. Auditor Fernandez that they have been instructed that it took effect the 16th day of November last. I am also informed by him that this 2 per cent. is only collected on the regular duty, and not in any case on that specified in the translation sent by me as "duty on 100 kilograms, gross," whether the same be in the so-called free list or in the regular tariff list.

I understand, also, from the law that this duty is not collectible at frontier or non-maritime custom-houses.

Immediately on receipt of the information as to this law, this custom-house made out bills and sent them to the brokers and merchants in this city, who import goods, for the 2 per cent. on all importations made by them since November 16 last, up to that date, say April 5, instant. The bills aggregate over $10,000, and this custom-house proposes to enforce the payment thereof by arbitrary process. This will be resisted or protested against by those interested, but whether to any result or not, cannot now be told. The grounds on which they propose to appeal or protest against the payment are—

1. That they have in good faith paid all duties of which they had any knowledge since November 16 last, up to April, 1882; that had other duties been required by the custom-house people they would have paid the same at the proper time; that as brokers they have received their pay for importing goods for others and cannot now at this date collect 2 per cent. on all duties paid by them for others since last November; that as merchants they have sold the goods received at certain prices which were made without considering this additional duty.

The brokers, in addition, may state that of two firms, one of which was a large importer, one has been closed and the owner returned to Spain while the other has gone into bankruptcy, and they cannot realize from them the extra amount required by the additional tax.

2. That this is not a maritime custom-house and that all the goods on which this maritime tax is sought to be levied have been received by flat-boats from Brownsville, Texas. That as this is a *frontier* and *maritime* custom-house all goods coming via Bagdad should pay, and those coming via Brownsville and the flat-boats should not pay, this extra duty for harbors.

3. That as this is a port in the Zona Libre, and that as the law of the Zona distinctly states that the duties provided thereby are the only import duties which shall be imposed, this 2 per cent. duty should not be collected in this port when goods are *imported* even if via Bagdad, but only when *internated*.

Of course it is a source of great annoyance to me that I should have put so much time, expense, and labor on my translation, and have sent it off thinking it entirely full and correct, only to learn now of another law to be added. I assure you, sir, that I took every possible care that such a thing should not occur, and as previously stated, went three several times to the custom-house to inquire if I had each and every law then in force. The ignorance of this custom-house is the only cause

therefor, and all the reasons they have therefor is that it was published as coming from another department, and that they had never noticed it or received official notification thereof.

WARNER P. SUTTON,
Consul.

UNITED STATES CONSULATE,
Matamoros, April 10, 1882.

INCLOSURE IN SUPPLEMENT NO. 1.

OFFICE OF THE SECRETARY OF STATE FOR PUBLIC WORKS, COLONIZATION, INDUSTRY, AND COMMERCE OF THE MEXICAN REPUBLIC, SECTION 3.

The President of the republic has been pleased to address me the following decree:

MANUEL GONZALES, constitutional President of the United States, to its inhabitants, know:

That the Congress of the Union has deemed proper to decree the following:

The Congress of the United Mexican States decrees:

ARTICLE 1. The Executive of the Union is authorized to contract with individuals or companies for the construction of necessary works for bettering the maritime service of the ports of the Gulf and of the Pacific.

ART. 2. He is also authorized to concede to individuals or companies the construction for a limited time of wharves and railroads for the use of same, of warehouses and machinery for the loading and unloading of goods, allowing to the contractors, according to the circumstances of each case, the collection of a moderate compensation for the time the concession lasts.

ART. 3. In the contracts for the construction of the works in the ports the executive shall exact the guarantees that insure the good conditions of execution of the work and its completion, and can offer bounty to the contractors in the event the works are concluded in less time than that stipulated.

ART. 4. To cover the expenses required by the works in the ports, whether constructed by contracts or by the administration, and in addition to the sums that may be voted yearly for the same object, the following duties are established in the budget of expenditures:

A. Foreign goods introduced in any port of the republic, whether of the Gulf or Pacific, shall pay an additional two per cent. on all the import duties to which they are subjected in accordance with the maritime and frontier customs tariff now in force.

B. National and foreign steam and sail vessels arriving at any of the ports of the republic, with or without cargo, excepting only such as enjoy privileges from contracts celebrated previous to this law, shall pay in addition to the established port charges five cents for every ton of register, except those that from stress of weather or damages should put into the port in distress.

C. In all ports where the depth of water has been augmented, ingoing and outgoing ships shall pay a duty of $1 for every *diametro* (decimeter?) obtained on the depth existing previous to the commencement of the works.

ART. 5. The duty referred to by fraction A shall be paid by the importers of the merchandise assessed. Those established by fractions B and C shall be paid by the consignees of the vessels for account of said vessels.

ART. 6. The contributions imposed by this law shall form a part of the federal rents, and shall be administered by the secretary of the treasury and respective officers.

The executive shall preferably apply the proceeds to the improvement of the harbors of the republic, endeavoring to disburse in each of the ports the proceeds of the contribution collected therein, besides the sums which may be decreed in the budge of expenditures for the same object.

IGNACIO CEJUDO, *President of the House of Diputados.*
JUAN CRISBSTOMO BONILLA, *President of the Senate.*
EMETERIO DE LA GARZA, *Secretary of House of Diputados.*
FRANCISCO G. HORNEDO, *Secretary of the Senate.*

Therefore, I command that this be printed, published, circulated, and duly complied with.

Given in the palace of the executive power of the union in Mexico on the 28th day of May, 1881.

MANUEL GONZALES.

To the citizen Manuel Fernandez, chief clerk of the department of state for the office of public works, colonization, industry, and commerce, and I communicate it to you for your knowledge and corresponding compliance.

Liberty in the constitution.

Mexico, May 28, 1881.

M. FERNANDEZ,
Chief Official.

To the ——— ———.

SUPPLEMENT No. 2.

GOODS FREE OF DUTY.

By the orders of the President of Mexico the following changes in the tariff were made public in the Diario Oficial of May 29, 1882:

The following articles will be free of the weight duties imposed by the laws of 31st May and 25th June, 1881:

A. Plows and their shares; masts, yards, round timbers, and anchors for vessels; quicksilver; live animals; bricks and roof tiles, all classes; refractory earth; wood, ordinary, for construction; seeds of cotton, tobacco, coffee, and sugar-cane; slates for roofs; vaccine pus.

B. All effects, armament and material of war, &c., that the Federal Executive may purchase in foreign countries for the different branches of the public service in his immediate dependence, shall not cause any duty on their importation.

(The above clauses will go into effect on July 1, 1882.)

V. From the 1st day of November, 1882, silver and gold, coined, in bullion, mineral powder, stone, or under whatever other form, will be free of duties in their interior circulation and for their exportation from the republic.

To substitute the duties that are suppressed by this fraction shall be augmented from the same date an additional duty of 2 per cent. over those fixed by the tariff for the importation of foreign effects, in the mean time (until November 1, 1882) collecting the duties on exports of silver and gold conformably to the existing laws in the present fiscal year.

VI. From November 1, 1882, precious metals shall pay a duty of one-half per cent. on the value of the silver and of one-fourth per cent. on the value of the gold, determining their values by their respective laws.

The Executive will determine the time and form in which it shall be comprehended.

VII. Export duties on orchil, $10 per ton of 1,000 kilograms.

VIII. Export duties on works for construction and for cabinet work, $2.50 for one cubic meter, and conformably to the provisions of the tariff of November 8, 1880.

These changes will greatly relieve commerce in the articles mentioned. The bulk duty on live animals (except geldings), plows, and plowshares, masts, &c., quicksilver, bricks, &c., and woods, is 50 cents the 100 kilograms, which on live animals and woods is particularly heavy.

The repeal of the export duty on silver and gold will afford great relief to financial transactions in all parts of the republic.

This has been the most annoying law in the whole tariff. Its repeal is accompanied by an augmentation of the regular import duties of 2 per cent.; but while this will doubtless bring into the treasury more revenue than the export duty of 5 per cent. on silver, and 12 per cent. on gold, yet the change will be thankfully received by business men.

Fraction VI says that a duty of one-half per cent. on silver and one-quarter per cent. on gold will be collected, and that the time and manner of carrying it into effect will be determined by the executive.

This is rather obscure, but I presume that it is intended to be a tax on production.

It will be noted that the repeal of the weight duty takes effect July 1, next, and that that repealing the export duty on silver and gold and substantiating an additional two per cent. on all importations takes effect on November 1, next.

WARNER P. SUTTON,
Consul.

UNITED STATES CONSULATE,
Matamoros, June 16, 1882.

NOTES.

CROP PROSPECTS IN EUROPE.

GERMANY.—Consul Du Bois, of Aix-la-Chapelle, under date of May 26, submits the following information respecting the condition of the crops in Northwestern Germany:

For five years the German farmer has not reaped an average harvest, and three out of the five years have witnessed much misery and want among the poorer class of agriculturists.

One year wheat, rye, and oats suffered great damage from the ravages of a late cold spring; the next year the hay crop was a complete failure, and a large amount of stock was forced upon the market and sold at a sacrifice, because there was not sufficient provender, and last year most of the cereals were exposed to continuous rains until the crop was greatly damaged, and in many instances quite ruined. But the encouraging outlook this year has awakened the liveliest hopes among all classes engaged in agricultural pursuits. Every cereal, without exception, is in as good condition as the most anxious farmer could desire. From Northwestern Germany, in fact from every part of Europe, come the most favorable tidings concerning the agricultural outlook.

The winter wheat, owing to the favorable season, is in such a prosperous condition that up to the present I have been unable to find any farmer inclined to complain. At present it seems that nothing can prevent a bountiful harvest save some great natural calamity, such as a consuming drought or a very damp and cold summer.

As it is with wheat, so it is with other grain and fruit, which is the result of a remarkable spring. Owing to the mild and even temperature, the farmer was enabled to plow and seed his acres at the proper time, and the weather continuing mild and genial, with ample rainfall, the result has been a strong and wholesome growth which bids fair to yield to the farmer of Northwestern Germany a more satisfactory harvest than he has garnered for a decade of years.

Thus nature has done everything for the farmer, and it cannot be denied but that the farmer has taken advantage of the opportunity which a friendly season has bestowed upon him, because everywhere signs of great agricultural activity abound, and farm labor is in great demand at wages ranging from six to eight dollars per month with board and lodgings included, which is considered a good compensation.

At this early date, however, nothing is absolutely certain. A cold, wet June would destroy in a great measure what seems now a probable excellent crop. A rainless June or July, or a damp and cold August and September, would greatly change the present flattering prospects, and bring great misfortune to the German farmer, whose cup of ill-luck has been gradually filling for the last five years.

AUSTRIA-HUNGARY.—Consul-General Weaver, of Vienna, under date of June 3, supplies the following information:

From latest information attainable it appears that the approaching grain harvest of Austria-Hungary will be very satisfactory, equalling generally, and surpassing in many districts, the average harvest both in quantity and quality. Of all the cereals rye alone has been injured to any considerable extent by the frosts during the month of June, and destructive hail storms have appeared to a very limited extent in certain localities, so that, unless injured by floods or excessive wet weather in harvesting, a large surplus export from this country, particularly of barley, may be expected. The production of wheat in this country, amounting to an average of 128,000,000 bushels for Austria-Hungary, barely supplys the home demand, although during the last decade about 2 per centum of the crop was left for clear export; that is, after subtracting the imports from the total exports of wheat. The recent movements of wheat, however, were not so favorable, as may be seen from the following table, showing the imports to and exports of wheat from Austria-Hungary during 1880, 1881, and the first three months of 1882, the amounts given in tons of 1,000 kilograms.

Period.	Imports.	Exports.
	Tons.	*Tons.*
During the year 1880	247,221	205,973
During the year 1881	324,611	201,559
First three months 1882	65,429	31,397
Total	637,261	438,929

Showing during the last twenty-seven months an excess of imports of wheat to the amount of nearly 200,000 tons.

The effect of the new tariff of entry duties, which taxes imports of wheat with approximately 6 cents per bushel, will be to restrict the amount imported, doubtless the design of the law, but the effect upon the *clear export* cannot be great. The price of wheat has varied but little during the last three months, being quoted at present writing from 9.30 to 10.20 florins per hectoliter (2¾ bushels), according to quality.

The phylloxera and the frosts have for several years previous reduced the grape harvests to less than half a crop, but the present year the vines present an unusually promising appearance, so that large expectations are entertained. From recent experiments with American vines, which have so far been successful against the ravages of the phylloxera, more extensive importation of these vines will be made in the immediate future on account of their being able to resist the attack of this noxious insect which threatens to destroy the wine industry of this country as well as that of France.

Wine trade of Jerez.—Consular Agent Davis writes from Jerez de la Frontera, Spain, concerning the wine trade of that district, as follows:

The exports from Jerez for the first four months of this year are in excess of those for the corresponding period of 1881, some 16,320 butts having been thus far shipped from this place against 14,765 butts in 1881, and this, notwithstanding the uncertainty which for some months existed with reference to the carrying out of the treaty between this country and France, now a "*fait accompli.*"

The difficulties with reference to the treaty with England seem to be as far from being solved as ever, Spain being disinclined to concede the reductions on British raw materials and manufactured articles demanded as a set-off against the admission into England of wines at a concession on the present scale of duties.

In the mean time France continues to purchase largely in all parts of Spain, though her imports from this country are limited almost exclusively to the cheapest description of last year's yield.

Business with the United States continues to improve, and the demand (which for some years past has been almost entirely limited to the cheaper grades of sherry) appears now to be extending to the finer qualities of the produce of this district. This feature is probably due to the fact that shippers are in a position to supply their clients with better value in the medium and higher grades than they have been able to for a long time past, a circumstance of which importers in the United States now seem wisely disposed to take advantage. The continued demand for cheap wines of the very lowest qualities, and the very short yield of this grade of sherry in 1881, have so diminished stocks that the supply is far from abundant at this moment, and prices become firmer daily. Taking into consideration the fact that all Spanish wines pay the same duty of 40 cents per gallon in the United States, it is remarkable that the better demand for the finer Jerez "crus" should only have set in so recently. Values were never better, and it is reasonable to suppose that ere long the delicately flavored "Amontillados" and generous "Olorosos" of Andalusia will cease to be a "sealed book" to the bulk of consumers in the United States.

It is as yet too early to form a definite opinion regarding this year's vintage. So far the vines look healthy, and the show of grapes is larger than might have been expected after the long-continued drought which has prevailed in this province since the month of January, and in consequence of which our cereals have suffered so disastrously. There are, on the whole, fair grounds to hope that the vintage will prove abundant and of good quality, and thus, in some measure, compensate for the almost complete destruction of our grain crop.

American trade with Messina.—Consul Owen reports to the Department "that the value of the declared exports from that consulate for the quarter ending March 31, 1882, amounted to $1,492,934; an increase, as compared with the same quarter 1881, of $316,644. Two American vessels cleared during the quarter with cargoes valued at $37,791.11." He adds:

I regret to be obliged to call the attention of the Department to the great decline in our carrying trade from Messina, and trust that measures may soon be taken to regain the ground we have lost. In the year 1868, 90 American vessels cleared with full cargoes at a good freight, while in 1882 only 2 are recorded. This decadence, taken in connection with the fact that the commerce with the United States is steadily increasing, indicates the great loss we have sustained as a nation.

Protection for inventions in Switzerland.—On page 178 of the consular reports for February, 1882, it was stated by Consul Mason, of Basle, that

on the 26th of November last the Swiss federal council had presented to the national assembly an amendment to the constitution empowering the federal congress to legislate for the protection of inventions; in other words, to enact a patent law. The same officer now reports that—

On April 28 this constitutional amendment, which had previously passed the house of representatives, was adopted in the senate by a vote of 27 to 3. The amendment thus enacted will be at once submitted to ratification by a vote of the people, concerning a result of which there can be little doubt, as popular sentiment is urgent and practically unanimous in favor of the passage of a liberal and comprehensive patent law. Such a statute is now in preparation, and will undoubtedly be enacted as soon as possible after the ratification of the pending amendment to the Swiss constitution. This will be an important event for American inventors and manufacturers.

Consumption of beer in Florence.—Consul Crain, of Milan, in a report published in No. 16 of this series, concerning the consumption of beer in Italy, stated that 1,678 barrels of imported beer were consumed in the city of Florence in 1881. Consul Crosby, of Florence, sends a later report, in which he says:

From investigations made into the matter both at the custom-house and the intendenza di finanza, at which latter office records are kept of every article of consumption, I find that 2,888.77 quintals of beer, of which 1,658.27 quintals from foreign countries, entered the city of Florence and that 1,230.50 quintals were manufactured in town. According to information derived from brewers and dealers in Florence, each barrel contains from 50 to 54 liters of beer, and the amount of beer consumed being equal to 5,776 barrels, of which 3,316 barrels were imported from Austria and Germany, and 2,460 barrels manufactured in the city.

The above derived from official and other authentic sources.

Cattle trade with Canada.—Consul Leland, of Hamilton, Canada, reports to the Department that there have been 2,262 head of cattle exported to the United States from that district during the last *four* months, valued in all at $71,614.60, and adds a suggestion for the tariff commission, "that a *specific* duty be imposed upon cattle imported therefrom, urging that it would tend to raise the standard of the stock imported, lessen and simplify duties of the United States customs appraisers along the Canadian frontier," and would destroy the tendency on the part of exporters "to undervalue cattle in order to lessen the present *ad valorem* duty."

American trade with Nottingham.—The declared value of goods sold and shipped to the United States from Nottingham, as reported by Consul Smith for the last month (June), was $610,989,000, an increase over the same month of last year of $173,890,000.

Lace of Nottingham.—Consul Smith also reports that the total value of lace of the United Kingdom (principally from Nottingham) exported to all countries during May last was $1,286,741, while the value for same month, 1881, was only $977,514, being an increase of $369,227. For the first five months of the year (1882), $6,735,990. For the first five months of the year 1881, $4,542,522, showing an increased trade in lace for the five months of this year of $2,193,468.

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COMMERCIAL RELATIONS OF THE UNITED STATES.

23330

REPORTS

FROM THE

CONSULS OF THE UNITED STATES

ON THE

COMMERCE, MANUFACTURES, ETC.,

OF THEIR

CONSULAR DISTRICTS.

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CONSULAR REPORTS

ON

COMMERCE, MANUFACTURES, ETC.

JULY, 1882.

HOW TO BUILD UP AMERICAN TRADE WITH INDIA.

REPORT BY CONSUL-GENERAL MATTSON, OF CALCUTTA.

INTRODUCTORY REMARKS.

Assuming that western civilization, which is now making fast progress in India, necessarily opens the way for western industry and commerce, this country, with its population of 252,000,000, presents at this time one of the most important fields in the world for the commerce of western nations, and most emphatically deserves the special consideration of our American merchants and manufacturers.

It is often alleged that the language and prejudices of the Hindoos form a great obstacle to western trade, but this objection has been greatly exaggerated, and, on the contrary, it is well demonstrated of late years that the people of India readily adapt themselves to any innovations which prove advantageous to themselves. As an instance, I will only mention that American kerosene oil, with its accompanying lamps, has within a very short time almost entirely supplanted the native oils and vessels, not only in the homes, but also in the temples of the natives, in every locality where it has been introduced, simply because it has proved to be cheaper and better than the oils formerly used.

IMPORTS OF INDIA.

The importation to India during the year ending March 31, 1881, amounted to more than $200,000,000, being an increase of 20 per cent. over the previous year, and out of this amount $165,000,000, or more than 82 per cent., came from Great Britain, and only $1,963,392, or less than 1 per cent., from the United States, and nearly all the latter ($1,817,780) was composed of kerosene oil, leaving only the insignificant sum of $145,612 for general merchandise. It is true that some American goods were imported via England by British merchants, but this also proves that the market is not receiving the attention which it merits from our own business men.

The object of this report is to point out the principal American goods suitable for this market, and to suggest some methods for their introduction.

AMERICAN MANUFACTURES SUITABLE FOR INDIA.

Among such goods I would mention cheap watches and clocks, kerosene lamps, small and cheap mechanics' tools of every description, electroplated goods, scales, cabinet organs, pianos, sewing machines, standard patent medicines, Yankee notions, chromo pictures, paper and stationery, tobacco, umbrellas, and a great number of our patented little contrivances for comfort and convenience, such as are sold very cheaply and take small room in shipping; also, largely, canned goods (fruits, vegetables, and salt fish) of the best quality. The total value of this kind of goods imported to India during the year mentioned amounted to over $5,000,000.

Kerosene oil has already gained a good market, and lubricating oils are being successfully introduced. On the contrary, labor-saving machinery will not, as a rule, be in demand here at present, because labor is too cheap and plenty; nor can heavy agricultural implements or machinery be introduced, because men and cattle have not sufficient strength to work them, and the cultivated fields are generally cut up by little dykes into very small irregular patches for irrigation purposes.

HOW TO INTRODUCE AMERICAN GOODS.

The retail trade is wholly in the hands of native merchants, who do business in a small way, and are obliged to take whatever goods are offered by the importers and jobbers. The importers are generally European merchants, whose local preferences, business relations, and facilities for buying naturally induce them to import European goods, and most of the American merchants are, in fact, only commission agents, engaged in exporting Indian raw materials to the United States. Hence, consignments of American goods to either of this class of merchants would not materially result in an extension of the trade. But there is a class of merchants and commission men who would gladly make a specialty of American goods, provided they could obtain them on the same terms as the European goods, namely, easy payments or free consignments, and through their agency the import would soon be considerable.

Another method is that long in use at home, namely, through commercial travelers and samples, which, however, has a great drawback in the remote distance and the want of knowledge of the country.

The last and best method would be in the formation at home of an American-Indian Company, with depots at Calcutta, Madras, and Bombay, under Indian resident partners or agents, and with experienced buyers at home. Such company could at once charter their own steamers direct, make quick cash sales to the native merchants, either privately or by auction, and it would find a permanent field already prepared for a very large and lucrative trade.

BRITISH *vs.* AMERICAN COTTON GOODS IN INDIA.

The trade in cotton piece goods and twists is of far greater importance, however, than that of all the other articles combined, and especially to the United States, not only on account of its magnitude, but also because the goods imported are nearly all made from American cotton, and could as well be manufactured in the United States as in England.

One very important item in the cotton goods trade is that of coarse

twist and yarn, of which the import amounted to over 41,000,000 pounds, valued at nearly $14,000,000, during the past year.

The total import of cotton manufacture during the year above mentioned amounted to more than $91,000,000, out of which only about $70,000 worth came from the United States, and nearly all the remainder from Great Britain. It is unquestionably owing, largely, to the want of enterprise at home that Great Britain has been permitted to monopolize nearly the whole of this trade; but it is never too late to mend, and if American manufacturers consider it worth the trouble, there can never be a more favorable time than the present for establishing a great market in India. All duties are abolished. British goods have become so adulterated and inferior that consumers only buy them because they can get no other, whereas American goods sustain a high reputation for purity and quality, so much so that European drills are often marked and sold as American goods, and American goods of any description are known among the native population; their character is above all reproach and commands general respect and confidence, and there can be no doubt that the first and great condition for building up an important trade in this country is to carefully maintain that reputation by furnishing only pure and valuable goods, and not stooping to a competition in adulteration and cheapness.

It is true that the native is fond of buying cheaply, but he is a good judge of quality of cotton goods, and will soon be reconciled to paying a higher price for a better article, which has already been demonstrated in the case of American drills; but he will not deviate from the modes and fashions which tradition, climate, and his own good sense justify; hence it is absolutely necessary that piece goods should be made according to Indian custom in width, length, texture, and color. For this and other reasons it can hardly be expected that any one or two individuals or firms will assume the expenditure of capital and time requisite for this particular trade, and it seems to me that the most practical plan for easy and certain success would be something like the following:

FORMING A SYNDICATE.

Some of our leading manufacturers and, perhaps, merchants should enter into a syndicate or other mutual co-operation for the purpose of manufacturing and exporting cotton goods to India. Such an organization, if possessing the necessary means, would at once command great influence and mark a new era in American-Indian commerce. Some experienced man could easily be secured in this country, either as partner or agent, to manage the business on this side, and who would send home samples of such goods as would be most profitable here and give detailed information concerning measures, packing, and shipping. The syndicate should be prepared to expend a reasonable amount of money for advertising their goods according to the customary methods of this country, and to give reasonable time for the first returns and profits.

If, however, such a large scheme, or if the manufacturing of piece goods especially for this market does not meet with favor, then the next best thing would be for any of our manufacturers that wish to establish a trade here, to find a correspondent who would make a specialty of their goods, and consign to him drills and coarse yarns (10*s*. to 30*s*.) and give him a fair and reasonable time for making his returns, so as to place him in that respect on at least equal terms with the consignee of European goods.

In making these suggestions I am aware that just now there is no ne-

cessity for our manufacturers seeking new markets for their goods, but I have particularly in view such future times as may and surely will come, when the ordinary demands will be oversupplied, and when India might afford sure and easy means of relief.

H. MATTSON,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
Calcutta, May 22, 1882.

OSTRICH FARMING IN THE UNITED STATES.

REPORT BY CONSUL BAKER, OF BUENOS AYRES, ARGENTINE REPUBLIC.

My recent report on ostrich farming in the United States * seems to have elicited considerable interest, and I am in receipt of many letters making further inquiries on the subject, and not having time to answer them separately, I have thought that the various questions asked might better be met by a supplemental report, which you will find inclosed.

I give the points in the order in which they occur to me:

1. I do not think it would be possible to send ostrich eggs to the United States and have them arrive there in good condition. The long voyage and motion of the ship, to say nothing of the passage they would have to make across the heats of the equatorial regions, would so addle them that they would be unfit for incubation upon their arrival. This is not merely my own opinion, but also that of the *ostrich farmers* located here.

2. The only safe way is to procure the birds; and Messrs. Hill, Protheroe & Co., who have been so successful in transplanting the African ostrich into this country, inform me that, so convinced are they that the United States offer all the facilities necessary to a successful prosecution of the business, they propose very soon to take a lot of the birds there and thus give our countrymen an opportunity of testing the new industry. They are now making arrangements to this end. The cargo will consist principally of four-year-old birds, as they stand a sea voyage the best, and they can be sold, by comparison, much cheaper than older birds, and besides, they assure me that from their experience of the losses and expense of bringing birds from the Cape of Good Hope, it does not pay nearly so well to import the feathered birds as to rear them from the breeders in the country itself.

On the subject of this industry and its naturalization in the United States I submit the following letter, which I have received from them:

BUENOS AYRES,
April 13, 1882.

DEAR SIR: We beg to state that we have made replies to the letters you handed us from various parties in the United States, asking further information than that contained in your own able report to the Department of State, on the subject of ostrich farming.

This enterprise continues to flourish in this country, so far as the well-being of the birds is concerned, and the quality of the feathers produced on the rich pasture of the pampas is much superior to the average at the Cape.

Our breeding birds have already commenced, and some chickens have been hatched out, and we shortly expect a further number.

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* Printed in No. 14, December, 1881.

Should you send any further report to your government we should like to point out the special advantages which we consider the United States offer to this industry; that there is in the country itself a vast market for all the feathers which can possibly be produced there for years to come; and doubtless there is an import duty* which will protect the home grower and enable him to obtain higher prices than foreign growers can in other markets. This fact influences, of course, the value of the chickens reared in the States, the highest price, of course, that can be asked for them is just what it costs to import. Now, as the expenses of shipping are very heavy, and the loss at sea is sure to be large and may be terrific, without the possibility of insurance, it will scarcely pay to introduce any but four-year-old birds and breeders, with a view of raising the feather birds in the States. Consequently, all fear of cheap importation being done away with, a very handsome figure can be asked for chickens, and the owners of breeding birds will reap a golden harvest.

The industry, indeed, will pay as well in the United States, or even better than it ever did at the Cape in the days of fabulous profits, when the demand for chickens was far greater than the supply, and when birds three months old readily brought £20 each; and this in a country which suffers from periodical drought, and has many other drawbacks, all tending to make ostrich farming less valuable, because less productive, than it will be in the United States.

That the business will assume larger proportions in your country we are quite convinced; and, as is usual in such cases, the first in the field will be the first to take advantage of the demand for young ostriches, which is sure to spring up.

We are, yours very truly,

HILL, PROTHEROE & CO.

E. S. BAKER, Esq.,
United States Consul.

3. In regard to the yield of feathers, I am advised that the product from one bird annually is worth about $60, wholesale, in London. If however, the pasturage is good, which it seldom is at the Cape of Good Hope, the yield is worth much more. Mr. Hill informs me that he has known one plucking sell for $150, and two pluckings can be taken in a year, but that is an exceptional case. A return of $50 per year is the very lowest that will be obtained under any circumstances. He has every reason, however, to believe that $120 worth of feathers from each bird will be given annually in the United States. An ostrich of two years of age which costs, say, $375, will therefore give about 26 per cent. gross profit. From this a small percentage must be deducted for accidents, and, say, $60 per bird for expenses, annually. Still this leaves about 15 per cent. clear; and when it is considered that any farmer of stock can generally place fifty birds and upwards upon his land, without making much difference to the pasturage, and that no herding is required where the fencing is good, and that but little trouble is involved, even at the prices quoted it is more than fair remuneration.

4. As to prices of birds delivered in the United States, Messrs. Hill, Protheroe & Co. inform me that they will probably be able to furnish breeders at $1,750 per pair; for four-year old birds, which may shortly be expected to breed, the price will be $1,200 per pair; and for two-year-old birds, $750 per pair.

5. In the case of four-year-old birds and breeders, it will be borne in mind that the return of profit is twofold: first, the feathers, which perhaps may not do more than pay the working expenses, as the birds when breeding require separate inclosures and to be fed on grain; second, the profit derived from the sale of the young chicks.

By the process of incubation, it may certainly be expected that sixty chicks will be annually reared from a pair of breeders. Their value is, of course, influenced to some extent by the activity of the demand; but intrinsically it depends upon two things, viz, the return of feathers

* The duty in the United States on ostrich feathers is as follows: "When crude, or not dressed, colored or manufactured, 25 per cent. ad valorem; when dressed, colored or manufactured, 50 per cent. ad valorem."

they give and the risk of death before they become productive. As regards the former point, a chicken gives its first plucking (always London wholesale prices), worth $5 to $6 per bird, at the end of nine months; and every six to seven months thereafter the really good feathers are produced, worth from $28 to $120 per plucking, according to the age of the bird. Every man can therefore judge for himself what a clutch would be worth to him, were risks and mortality out of the question.

6. In regard to mortality, almost everything depends upon the state of the pasturage and the rainfall. Generally, if a constant supply of lucerne (alfalfa) or clover or other green grass can be obtained, then ostrich farmers calculate on 10 per cent. as the rate of mortality, but should green stuff not be attainable when the chicks are from a few days up to three months old, the number of deaths may be excessive. I am told that at the Cape of Good Hope the chicks are sometimes almost worthless from the absence of herbage. In the Argentine Republic, and I presume in the United States, this great drawback will not be felt. After three months the special danger is passed, and at the Cape, chickens of this age for years have been worth from $50 to $60 each. After this time the mortality will probably not exceed 10 per cent.

Mr. Hill is of the opinion that for a long time to come birds three months old would be worth in the United States $120 each; for the expenses alone of importing ostriches will probably be almost this sum, to say nothing of the first cost and the risk of the voyage. Even at the price named the return would be satisfactory, and to the owners of breeding birds quite fabulous.

7. Regarding the management of the birds, as I have said before, all that is needed is an inclosed paddock, or grass field, with sufficient pasturage to sustain them. They should be collected and counted about once a week. Every month they should be brought into a small inclosure, when each bird should be examined, and the ripe feathers plucked. The process of displuming them is simple enough. They are put in a "corral" or small pen, so confined that they cannot exercise their propensity for kicking, and while two men hold the bird, a third proceeds to pluck the feathers. A still safer and more satisfactory way is to put the bird in a box or stall made for the purpose. When the birds are breeding, each pair should have a small inclosure to themselves—say seventy yards square—and a little grain daily. They produce an egg every two days. In violent storms shelter is always better for the flock, but this is not really necessary.

There will be needed a small room for the incubating machine, and oil enough for the lamp which heats the water; also shelter for the chicks up to the age of two or three months. This is about all; and, as in other employments, success will be attained by care and attention.

8. The best book upon ostrich farming is that of Mr. Douglass, of Cape Town. It is published by Cassell, Petter, Sulpin & Co., London and New York. It will be observed in this book that the author advises two or three years' experience on an ostrich farm before starting the business. In regard to this, Mr. Hill says that Mr. Douglass addresses himself to young Englishmen, who have been brought up to nothing, and know nothing, or very little, of farming pursuits. He insists that any intelligent man, in the least accustomed to take care of stock, can learn the habits of these birds in a month, as also how to treat the few diseases to which they are subject; and if he buys healthy birds, he will be successful from the first, provided the farm is a suitable one.

I have obtained the above points either directly from those who are practically acquainted with the business of ostrich farming or from observations of my own while visiting the farms in this vicinity, and I think they will be found reliable.

In regard to the special advantages which the United States offer for the prosecution of the industry, I do not think there can be any question.

Ostriches are doubtless capable of standing the climate of almost any of the States, but productive ostrich farming, whether for the feathers or for raising the chicks for sale, ought not to be attempted except in the milder portions of the country, as the Southern, Southwestern, and Pacific States.

The birds are naturally timid, but are readily domesticated, especially when they are produced by incubation; and they become on the farm as tame as chickens, ducks, or geese.

The males, however, are not quite so tractable, and during the breeding season they sometimes become aggressive; and then they have to be watched or they may do mischief. Their kick is severe and sometimes fatal, though by facing them with no manifestation of fear, and using a stick three or four feet long with a fork at the end into which the neck of the bird is inserted, their attacks can generally be avoided.

Messrs. Hill, Protheroe & Co. informed me that immediately upon the shipment of a cargo of the birds to the States the fact will be publicly announced, as also their port of embarkation.

E. S. BAKER,
Consul.

UNITED STATES CONSULATE,
Buenos Ayres, May 1, 1882.

TRANSFER OF AUSTRIAN INDUSTRIES TO THE UNITED STATES.

REPORT BY CONSUL-GENERAL WEAVER, OF VIENNA.

I am in receipt of a valuable communication from one of the leading manufacturers of artistic textile fabrics in this city, who, becoming dissatisfied with the outlook for his business in this country, is very anxious to be put in communication with capitalists and others in the United States who would aid him to transfer his manufactory, with the necessary skilled workmen, from this city to some eligible locality in the United States, where he believes the industry might be successfully and profitably established.

For this purpose, therefore, I beg to submit herewith a copy of his remarks and suggestions, withholding his name for the present for certain reasons, but would inform any who may wish to correspond in regard to his project that all letters addressed "Hof-Kunstanstalt," care of this consulate general, will be duly delivered. Hoping that you may consider the communication of sufficient interest to warrant its publication in our monthly reports, I beg to submit it herewith.

JAMES RILEY WEAVER,
Consul-General.

UNITED STATES CONSULATE GENERAL,
Vienna, June 14, 1882.

[Inclosure in Consul-General Weaver's Report.]

ART WEAVING IN EUROPE AND IN THE UNITED STATES.

In sundry reports of American consulates, among others, for instance, in that of the city of Basel, dated December, 1881, it is stated that the exportation from Europe to America as regards plain stuffs and ribbons is rapidly falling off, and that the decrease for that city and environs alone amounted to above $100,000. It was further remarked that, in consequence thereof, the manufacturers were obliged to apply themselves exclusively to the production of fancy goods, and that, thenceforth, it was only by the constant contrivance of novelties they could maintain pre-eminence and keep the United States tributary to them, probably for a long period yet, or at least as long as continental wages were considerably cheaper than those of the former.

Wages indeed are of great moment in the production of goods of a certain description, but in that of fancy articles, especially when made of costly material, they are of much less importance, and, at any rate, are far from creating the slightest impediment to the establishment of very lucrative manufactories for fancy tissues in the United States, if under the management of experienced professional men, who have all necessary routine in the line of hand and art weaving at their command, for which Europestands pre-eminent. Protected by a duty of 75 per cent. ad valorem, while the wages with fancy articles constitute scarcely *one third* of their market value, it is obvious that a difference of wages is of no great moment in the calculation.

As to the ability of producing fancy articles of every description, not only with technical but also artistic perfection and taste, so as to be able to compete with any other country, there need be no hesitation whatever on the part of American enterprise, the less so as great numbers of able workmen and specialists of every line would be happy to leave moldering Europe (where boys are born to become soldiers) rather than pay heavy taxes and end by starvation.

The history of tapestry weaving furnishes us a striking instance of the prosperity to which an industry may attain, even when transplanted upon a foreign soil. For example, this art was introduced by Francis I and other French kings, from Italy and Flanders, into France, and to this very day it forms one of the richest resources as well as the industrial pride of its stirring and assiduous inhabitants. The Huguenots, expelled from France by the Edict of Nantes, founded very flourishing industrial establishments everywhere abroad, which were destined to be the crystallizing points for extensive manufacturing centers thereafter.

When such translocations could be successfully performed at a time when removal from one place or country to another was coupled with numerous difficulties and impediments, how much the more easily are they to be accomplished at present, when locomotion almost annihilates distance and its cheapness places it within the reach of even the poor!

Still there may be some difficulty in obtaining able workmen from such quarters as hold a commanding position, even to this day, such as Lyons, where a most excellent organization, has thus far silenced any thought of removal. But France no longer stands alone in the domain of art industry in general, and that of art weaving and embroidery in particular. The fact is that, since the year 1852, there are to be found in other countries as well as in France, those who not only contrive to compete with France, but even to excel her sometimes. If these could not maintain the ground they had conquered, and were ultimately obliged to waive the advantages they had obtained, it is by no means their lack of skill or ability which is to account for their shortcomings, but unfavorable circumstances which encumbered their progress and lamed their energy.

Offer to such a man—who has come to the conviction that no improvement whatever in his condition is awaiting him at home—the means of setting up a manufactory in the United States, and there is no doubt but that he will gladly avail himself of the opportunity and with pleasure quit a country where stagnation is brooding in every corner and ultimate starvation stares the industrial classes in the face.

Although no statistical data are at hand just now to show the exact amount of the importation of art tissues and art embroideries for furniture, tapestry, and clerical purposes into the United States per annum, it may be stated with a degree of certainty that any capital invested in that line will not only bear plentiful interest, but will soon call for an increase of production, and open a prospect of lucrative investment of capital in the manufacture of other articles as well, connected with this branch. Since America by her energy and enterprise has obtained so brilliant a success in the line of trade generally, and professional trades in particular, it can hardly be supposed that there would not be found men of capital and enterprise as well for the special line of art weaving and embroidering who, united with well experienced, professional men from Europe, would bring about as favorable a result as elsewhere, as regards perfection, and much more as regards the profits in a country where there is no competition.

It is possible that simply by calling the attention of the American public to this

state of things and pointing out the advantages to be reaped, the American Government can be greatly instrumental in realizing the wishes above expressed and utilizing the suggestions made.

Austria especially, in consequence of the efforts made privately and the encouragements on the part of the Imperial Museum, numbers a great many technical artisans of pre-eminent ability, otherwise doomed to a life of sterility and unproductiveness, who are anxiously awaiting the hour of redemption, when avenues will be opened to their skill and ability. Is it too much to be hoped that a loud demand at no distant day may ring out hopefully from the great republic of the new world?

AMERICAN PRODUCTS IN THE WEST OF ENGLAND.

REPORT BY COMMERCIAL AGENT DAVIS, OF GLOUCESTER.

Swine fever and American bacon.—American provisions are now sold in every city, town, village, and hamlet in this district; and in view of the fact that swine fever is now prevalent, and hogs are being slaughtered in large numbers to prevent its spreading, American bacon and hams will be in increased demand, and the price considerably advanced. The swine fever has been in this district in some localities for the past two years, and during that time every means have been tried and used to prevent its spreading. It has now increased to such an alarming extent that a royal commission has been issued to inquire into the cause and devise means to prevent its spread and, if possible, stamp it out. This and the adjoining county of Berkshire are both noted for the number and breed of hogs, and this disastrous fever will have a very distressing effect on the bacon market. The London market is supplied largely from this district with its fresh pork and bacon. It is generally supposed that the public markets for swine in this and other cities will be closed in a short time. A number of hog breeders have been served with notice to keep their hogs confined to their own premises, and to use every means to cleanse and fumigate the same. We cannot hope for a supply of bacon from anywhere but the United States, and the demand in the near future must be very large.

American fruit.—The fruit crop of this district is this year very short. The counties of Gloucester, Worcestershire, Herefordshire, Somerset, and Devon are regarded as the fruit counties of England. This year the crop is considerably less than one-half the usual yield, and very inferior in quality. In April and May the trees gave promise of an increased crop of fruit, but in the latter part of May we were visited by a fearful blight that not only destroyed the fruit, but in many cases the leaves and even the trees. American fruit has gained favor in the English market during the past two years. Its superior quality has been fully admitted, the only complaint I have heard has been respecting the careless and imperfect packing, a matter easily remedied if the attention of our fruit-growers is called to it. I feel satisfied that the demand for American fruit from this market will be very large this year.

American cheese is continually growing in public favor here. What is known as "American Cheddar," is now commanding a better price and is admitted to be superior in quality to any cheese made in this country. The journal of the Royal Agricultural Society here of late discussed this matter very fully and admitted the superior quality of American cheese.

Oleomargarine.— Permit me to call your attention to an article that I

think is not fully understood, or its excellence not appreciated in our country. I mean "oleomargarine." The consumption of this article in this country is immense and continually on the increase. What is known as "butterine" commands a better price and is admitted to be superior in quality to butter made in the old way. It has the great advantage of being uniform in color and quality, and not subject to the different changes caused by herbage and the temperature of the cow's body at the time of milking, the careful or otherwise keeping of cream, and a hundred other causes that the farmer has, in my opinion, paid only slight attention to. It has now been demonstrated beyond doubt that oleomargarine is a good, useful article of food, and can be used with not only safety but great advantage. I venture to predict that it will soon become as much in favor with the dealer and general public as the canned fruit, vegetables, fish, meat, &c., for which our country has become so justly celebrated. Time is fast wearing off the sharp edges of prejudice; ignorance is dispelled by learning and research, and truth is dawning on the public mind. So that any article presented to the public that has in it true merit will not be long before the merit is recognized and appreciated. Oleomargarine, in my opinion, combines excellence of quality with portability and freedom from the many grave objections to butter made in the old way, to which I have already referred.

JOHN DAVIS,
Commercial Agent.

UNITED STATES COMMERCIAL AGENCY,
Gloucester, June 19, 1882.

TRADE BETWEEN CANADA AND THE UNITED STATES.

REPORT BY COMMERCIAL AGENT CARROLL, OF ST. THOMAS.

I have the honor to inclose herewith statements of the exports and imports from and into St. Thomas, Canada, for the period commencing April 19, 1881, and ending December 31 of that year, and for the calendar year 1881.

In the statement of exports, as well as in that of imports, I have made a detailed exhibit of the articles for the respective periods, together with a classification by quarters, in order that comparisons and information may be more readily made and gleaned therefrom.

In the statement of imports, I have deviated from the usual custom adopted in the preparation of similar reports, and present each article separately, together with the duty thereon, no matter how small the importation. I have pursued this course because of its apparent comprehensiveness and value to persons who may desire to open a trade, or extend that already opened, with this part of Canada, a thing that can easily be done if those interested devote a little time and attention to the matter.

By reference to the rate of duty and the value of the articles imported, the merchant or manufacturer can tell whether it will be worth while to solicit customers in this or any other part of Canada. If any person should be desirous of doing this it will afford me great pleasure at any time to furnish a list of merchants and others who import goods, in order to facilitate the opening of correspondence with them to that end.

This procedure would be inexpensive and entail little or no risk should it result in opening a trade, as the business men of St. Thomas bear the reputation of being honest and prompt in the discharge of their obligations.

The exports to the United States are largely in excess of imports therefrom, but without any effort on the part of American dealers, and notwithstanding a high protective tariff, the imports are increasing, those of 1881 having exceeded those of 1880 $20,644.

St. Thomas is a growing city, composed of energetic, enterprising, and well-to-do people. Seven or eight years ago its population numbered about 1,500. It has now a population of about 9,000. It has four great railroads running into it, two of which, the Great Western and Canada Southern, run directly through from Buffalo to Detroit. It has great prospects, and its citizens think it will run far ahead of some of its more ancient and pretentious Canadian sisters. I have no doubt it will, and I respectfully suggest that it might be well for Americans to give it a little attention.

In conclusion, I beg to express, through the Department, my acknowledgments to Her Majesty's courteous and efficient collector of customs, Mr. Dunham, and his equally courteous and efficient assistants, Messrs. Smilie and King, of St. Thomas, to whom I am indebted for the data from which I make the statement of imports herewith.

PHILIP CARROLL,
Commercial Agent.

UNITED STATES COMMERCIAL AGENCY,
Port Stanley and St. Thomas, May 29, 1882.

EXPORTS TO THE UNITED STATES.

Statement showing the value and character of the exports from the consular district of Port Stanley and St. Thomas, Canada, to the United States (exclusive of the agency at Port Rowan), during the period commencing April 19, 1881, *and ending December* 31, 1881, *viz:*

Wheat	$79,800 04
Barley	68,651 85
Lumber and timber	61,484 66
Staves	39,565 57
Hoops	33,235 71
Sheep and lambs	32,159 42
Cattle, including horses	21,115 90
Household effects	19,444 50
Scrap iron	16,626 74
Malt	16,598 03
Flax	5,786 10
Beans	5,727 96
Hay	5,532 25
Hides	3,401 12
Bolts	2,675 00
Wool	2,410 00
Eggs	2,328 80
Apples	2,311 70
Clover seed	2,170 00
Turnips	1,188 24
Potatoes	2,686 99
Split pease	875 00
Kaoka	112 50
Miscellaneous	3,184 92
Total	429,073 00

NOTE.—The present incumbent of the office entered on duty April 19, 1881. Before that time a full record of the exports does not appear to have been kept. Hence the

absence from this report of the first quarter and a portion of the second quarter of 1881.

The exports by quarters for the period from April 19, 1881, to December 31, 1881, were as follows, viz:

Fraction of the second quarter	$80,706 91
Third quarter	74,546 13
Fourth quarter	273,819 96
	429,073 00

IMPORTS FROM THE UNITED STATES.

Statement showing the imports from the United States into St. Thomas, Canada; the duty thereon and character thereof, during the calendar year 1881.

Articles.	Duty.	Value.
Carriages	30 per cent	$1,311 00
Hydraulic waterlime, &c	40 cents per barrel	557 00
Anthracite coal	50 cents per ton	24,261 00
Bituminous coal	60 cents per ton	27,590 00
Coke	50 cents per ton	1,482 00
Coffee, green or roasted	2 and 3 cents per pound and 10 per cent	131 00
Copper tubing	10 per cent	148 00
Cider	20 per cent	3 00
Cocoa	25 per cent	73 00
Boots and shoes	25 per cent	41 00
Toys, wooden	According to material	31 00
Cotton thread	20 per cent	31 00
Velveteens	20 per cent	374 00
Cotton wirceys, plain	20 per cent	176 00
Cotton wirceys, checked	2 cents per square yard and 15 per cent	182 00
Other manufactured cotton not specified	20 per cent	6,067 00
Crapes	20 per cent	362 00
Laces	20 per cent	988 00
China and porcelain ware, &c	25 per cent	784 00
Essences of apples, pears, &c	$1.90 per gallon and 20 per cent	141 00
Indian corn	7½ cents per bushel	5,183 00
Fire brick	20 per cent	131 00
Drain tile and pipes	20 per cent	2,922 00
Brushes	25 per cent	167 01
Buttons	25 per cent	315 00
Paraffine wax	5 cents per pound	162 00
Bird cages	30 per cent	62 00
Shoe blacking	25 per cent	189 00
Lead, black	20 per cent	48 00
Wheat	15 per cent	16 00
White and dyed cotton jeans	20 per cent. ad valoerm	1,044 00
Tiles for roofing	20 per cent	25 00
Horses	20 per cent	1,303 00
Baking powder	20 per cent	433 00
Books, printed	15 per cent	1,147 00
Advertising pamphlets	$1 per 100	48 00
Books, blank	30 per cent	309 00
Bibles	5 per cent	283 00
British copyright books	15 per cent. and 12½ addition	38 00
Shawls	25 per cent	565 00
Cordage	10 per cent	11 00
Combs, toilet	25 per cent	94 00
Clocks	35 per cent	158 00
Carpets	20 per cent	1,815 00
Wheat flour	15 cents per barrel	1,191 00
Brass bars	10 per cent	29 00
Brass wire cloth	20 per cent	184 00
Collars and cuffs	30 per cent	229 00
Barley	15 cents per bushel	1 00
Maps and charts	20 per cent	195 00
Printed music	6 cents per lb	137 00
Valentines	25 per cent	20 00
Bookbinders' tools	15 per cent	33 00
Suspenders	35 per cent	203 00
Tubing, brass, seamless, &c	10 per cent	232 00
Wire, brass	10 per cent	64 00
Electric and galvanic batteries	25 per cent	124 00
Fans	25 per cent	38 00
Clothing, linen	20 per cent	27 00
Thread, linen	20 per cent	104 00
Blackberries	2 cents per quart	17 00
Electroplated ware	30 per cent	235 00
Gunpowder	5 cents per lb	103 00
Gutta-percha	25 per cent	123 00
Hats, fur	25 per cent	949 00

Imports from the United States—Continued.

Articles.	Duty.	Value.
Ink	20 and 25 per cent	$18 00
Iron:		
Bars	17½ per cent	3, 936 00
Bolts	30 per cent	39 00
Bedsteads	25 per cent	139 00
Car wheels	25 per cent	1, 507 00
Castings	25 per cent	2, 168 00
Boiler plates	12½ per cent	1, 192 00
Chains and cables	20 per cent	123 00
Hoop iron	12½ and 17½ per cent	680 00
Tubing	25 per cent	817 00
Wire	15 and 20 per cent	36 00
Hardware	30 per cent	1, 566 00
Stoves	25 per cent	374 00
Other manufactured iron	20 per cent	295 00
Locks	30 per cent	188 00
Fire-extinguishers	25 per cent	543 00
Cutlery, steel	20 per cent	867 00
Needles	20 per cent	10 00
Saws, steel	30 per cent	282 00
Muskets	20 per cent	206 00
Other manufactured steel	20 per cent	669 00
Carpenters' tools	30 per cent	238 00
Cultivators and plows	25 per cent	1, 997 00
Horseshoes	30 per cent	3 00
Locomotive tires	30 per cent	$68 00
Spades and shovels	30 per cent	392 00
Grapes	2 cents per pound	15 00
Oranges, lemons, and other fruit not specified	20 per cent	407 00
Glass lamps, chimneys, &c	30 per cent	2, 747 00
Glass, stained	30 per cent	192 00
Glass, silver-plated	25 per cent	26 00
Glass, plate	20 per cent	1, 949 00
Gold, manufactured	20 per cent	60 00
Peaches	4 cents per bushel	3 00
Ivory	20 per cent	2 00
Lead, shot	25 per cent	24 00
Leather:		
Patent	20 per cent	82 00
Belting	25 per cent	62 00
Other manufactured leather	20 and 25 per cent	266 00
Plants	20 per cent	329 00
Cheese	3 cents per pound	8 00
Lard	2 cents per pound	86 00
Fruit, in tight cans, not sweetened	2 cents per pound	160 00
Gas fixtures	30 per cent	604 00
Lead pencils	25 per cent	3 00
Plaster of Paris	10 and 15 cents per 100 pounds	32 00
Hair oil	30 per cent	4 00
Other oil, not specified	20 per cent	645 00
Flowers, artificial	25 per cent	62 00
Woolen dress goods	20 per cent	4, 109 00
Carpets, Brussels	20 per cent	4, 981 00
Yarn	7½ cents per pound and 20 per cent	52 00
Clothing, wool, ready made	10 cents per pound and 25 per cent	860 00
Cordage for ship purposes	30 per cent	22 00
Cork wood	20 per cent	30 00
Sweet potatoes	20 per cent	259 00
Watches	25 per cent	127 00
Furniture	35 per cent	1, 107 00
Manufactured wood	25 per cent	601 00
Lumber	20 per cent	667 00
Blankets	7½ cents per pound and 20 per cent	554 00
Cassimeres	7½ cents per pound and 20 per cent	4, 511 00
Hosiery	20 per cent	225 00
Watch movements	20 per cent	21 00
Flannels	7½ cents per pound and 20 per cent	398 00
Hoisery, cotton	30 per cent	241 00
Pumice stone	20 per cent	28 00
Ratans	20 per cent	51 00
Sand-paper	20 per cent	65 00
Sausage casings	20 per cent	130 00
Flower seed	15 and 25 per cent	1, 415 00
Silk brodes	30 per cent	898 00
Silk twist	25 per cent	101 00
Soap, brown	1½ cents per pound	15 00
Stationery	20 per cent	299 00
Silk dress goods	30 per cent	1, 982 00
Silk velvet	30 per cent	294 00
Other silk, not specified	30 per cent	1, 193 00
Slate, red, roofing	$1 per square	15 00
Slate, bl ck, roofing	80 cents per square	18 00

Imports from the United States.—Continued.

Articles.	Duty.	Value.
Sugar candy	1 cent per pound and 35 per cent	$173 00
Tin blocks	10 per cent	7,930 00
Tin cans	1½ cents per can	32 00
Tinware	25 per cent	260 00
Cigars	60 cents per pound and 20 per cent	3 00
Turpentine spirits, &c	20 per cent	723 00
Varnish	20 cents per gallon and 20 per cent	2,197 00
Metal, Babbit	10 per cent	169 00
Marble slabs	15, 20, and 30 per cent	750 00
Stereotypes, &c	20 per cent	51 00
Printing type	20 per cent	109 00
Pewter	20 per cent	18 00
Mineral substance, &c	20 per cent	106 00
Mineral aerated waters	20 per cent	4 00
Reed organs	10 and 15 per cent	219 00
Metal, bituminous	25 per cent	36 00
Vinegar	12 cents per gallon	15 00
Beeswax	20 per cent	21 00
Whips	25 per cent	45 00
Carpet, ingrain:		
Two and three ply, wool	10 cents per square yard and 20 per cent	923 00
Cotton warp	5 cents per square yard and 20 per cent	492 00
Coal oil and gas fixtures	30 per cent	156 00
Zinc	25 per cent	3 00
Pickles	20 per cent	5 00
Sewing-machines	$2 each and 20 per cent	251 00
Mill irons	20 per cent	191 00
Pig-iron, charcoal	$2 per ton	22,470 00
Safes, &c	25 per cent	3,562 00
Screws	35 per cent	98 00
Sheet-iron	12½ and 17½ per cent	2,875 00
Wire, steel	15 per cent	165 00
Edge tools	30 per cent	63 00
Jewelry	20 per cent	465 00
Malleable iron castings	25 per cent	109 00
Cut nails	½ cent per pound and 10 per cent	4 00
Scales	20 per cent	137 00
Sand-paper	20 per cent	21 00
Ribbons	30 per cent	667 00
Toilet soap	30 per cent	71 00
Prepared meats	2 cents per pound	113 00
Parasols:		
Silk	25 per cent	62 00
Cotton	25 per cent	164 00
Soap, castile	2 cents per pound	57 00
Starch	2 cents per pound	56 00
Free and sand stone	$1 per ton	2,862 00
Grindstones	$2 per ton	180 00
Granite	20 per cent	310 00
Tea, black	2 cents per pound and 20 per cent	227 00
Twine	25 per cent	21 00
Potatoes	10 cents per bushel	30 00
Tomatoes	30 cents per bushel	8 00
Tomatoes, in cans	2 cents per pound	81 00
Thrashing machines	25 per cent	1,200 00
Sirups	30 per cent	81 00
Wire, copper	10 per cent	26 00
Cotton, bleached	1 cent per square yard and 15 per cent	1,721 00
Cotton jeans	2 cents per square yard and 15 per cent	1,271 00
Cotton wadding	2 cents per pound and 15 per cent	221 00
Cotton bags, seamless	2 cents per pound and 15 per cent	47 00
Cotton clothing	30 per cent	1,139 00
Cotton duck for boat suits	5 per cent	6 00
Gutta-percha:		
Clothing	30 per cent	34 00
Hose	20 per cent	1,055 00
Bracelets, hair	20 per cent	51 00
Cloth, hair	20 per cent	29 00
Beaver hats	25 per cent	710 00
Straw hats	25 per cent	17 00
Ink, printing	20 per cent	26 00
Agricultural implements	25 per cent	218 00
Crucibles	20 per cent	68 00
Patent medicines, liquid	50 per cent	82 00
Patent medicines	25 per cent	100 00
Drugs	20 per cent	29 00
Earthenware	30 per cent	1,192 00
Feathers, dressed	25 per cent	14 00
Felt, for roofing	20 per cent	81 00
Linens	20 per cent	3,413 00
Demijohns	30 per cent	85 00

Imports from the United States—Continued.

Articles.	Duty.	Value.
Fish, fresh	1 cent per pound	$4 00
Nuts	20 per cent	25 00
Manufactured glass, not elsewhere specified	20 per cent	1,168 00
Gloves	25 per cent	1,143 00
Gold soap	25 per cent	87 00
Electroplated ware	30 per cent	6,503 00
Gutta-percha belting	25 per cent	48 00
Cartridges	30 per cent	19 00
Cranberries	30 cents per bushel	68 00
Animals, not specified	20 per cent	14 00
Ale	8 cents per gallon	4 00
Pianos	$25 and $30 each and 15 per cent	3,049 00
Other musical instruments, according to material.	25 per cent	158 00
Coal and kerosene oil	7½ cents per gallon	3,365 00
Lard oil	20 per cent	529 00
Neat's-foot oil	20 per cent	4,396 00
Lubricating oil	25 per cent	10,899 00
Flax-seed oil	25 per cent	210 00
Oil-cloth, floor and table	30 per cent	556 00
Packages	20 per cent	945 00
Mustard seed	25 per cent	4 00
Paintings	20 per cent	716 00
Paint, in colors	20 and 25 per cent	3,375 00
Wall-paper	30 per cent	1,138 00
Pickles	20 per cent	26 00
Plants	20 per cent	2,801 00
Butter	4 cents per pound	4 00
Bacon	2 cents per pound	1,444 00
Poultry	20 per cent	2 00
Putty	25 per cent	28 00
Paint, white lead	5 per cent	20 00
FREE LIST.		
Mahogany		291 00
Broom corn		1,312 00
Fish and oysters		5,086 00
Hides		170 00
Bamboo reeds		136 00
Tobacco manufactured for excise		1,819 00
Hog and horse hair		5 00
Hoofs		4 00
Cotton waste		4,977 00
Nets and seines		502 00
Steel ingots		3,222 00
Seaweed moss		377 00
Oil-cake		339 00
Pitch and tar		28 00
Veneers, of wood and ivory		264 00
Household goods		15,109 00
Sand		24 00
Breeding stock		500 00
Eggs		8 00
Duck for felling and hose		103 00
Fire-clay		16 00
Walnut		43 00
Besides the foregoing there have been importations under the head of "unenumerated" or miscellaneous articles, the value of which in the aggregate being		14,633 00
Making the total value of the importations into St. Thomas during the year 1881		291,553 00
The duty realized on these importations by the Dominion Government was		51,788 05

RECAPITULATION.

Exports from St. Thomas, Canada, into the United States during the period from April 19, 1881, to December 31, 1881	$429,073 00
Imports from the United States, &c., into St. Thomas during the year 1881	291,553 00
Difference in favor of the exports	137,520 00
Imports from the United States, &c., into St. Thomas, Canada, during the year 1880	270,909 00
Increase of the imports of 1881 over those of 1880	20,644 00
Duty realized by the Dominion Government on goods imported into St. Thomas during the year 1881	51,788 05

FALSIFICATION OF FRENCH BRANDY FOR THE UNITED STATES.

REPORT BY CONSUL GEORGE GIFFORD, OF LA ROCHELLE, ON THE FALSIFICATION OF BRANDY EXPORTED FROM THE CONSULAR DISTRICT OF LA ROCHELLE TO THE UNITED STATES.

No considerable quantity of wine being exported to the United States from the La Rochelle district, my inquiries have been wholly confined to the quality of the brandy produced in this region whence nearly the entire supply of our country is drawn. In the year 1881 the export of brandy from France to the United States was of the declared value of $1,338,563, of which a part, valued at $1,210,851, was shipped from this district, chiefly from the town of Cognac.

PRODUCTION CEASED.

The conclusion is inevitable at the outset that the production of genuine brandy from the white wine of the country has substantially ceased on account of the failure of the vine. In a trip for personal observation through the "Grand Champagne" region of the department of Charente, I was unable to find a single vineyard; the destruction caused by the phylloxera is complete, and not a barrel of wine will be made this year in that famous country. In the region of the so-called "Petite Champagne" a few vines may still be seen; and in the "Bois," where formerly a pure brandy, but of relatively inferior quality, was produced, the wine crop of the last three years has been of comparatively trifling importance. Everywhere wheat-fields occupy the soil formerly covered by the vine. In the whole department of Charente 197,500 acres of land, all in the zone of inferior brandy, remain nominally devoted to vineyards; but two-thirds of this area is already attacked by the phylloxera. In the Lower Charente, where also a portion of the white wine was formerly distilled, 375,500 acres of vineyards still exist; but 125,000 acres are rendered in great measure unproductive by the progress of the disease, which is this year making its appearance upon the coast itself, where it has hitherto been supposed that its approach was not to be dreaded. The average annual production of wine was formerly 176,000,000 gallons in the two departments. For the last three years it has been as follows:

	1879.	1880.	1881.
	Gallons.	*Gallons.*	*Gallons.*
Charente	12,081,124	18,387,774	12,633,069
Lower Charente	26,764,596	41,226,768	37,548,038
Total	38,845,720	59,614,542	50,281,098

The production of wine has therefore fallen to less than one-third of its former average, and in the Cognac region it has ceased. The production of genuine brandy has diminished in a much larger proportion, since the 50,000,000 gallons of wine reported for 1881 include the red wines not used for distillation, and the high price of the small quantity remaining fit for making brandy prevents its general use for that purpose.

FALSIFICATION OF BRANDY.

Production having ceased three years ago, the only genuine brandy sent to the United States is drawn from the stocks accumulated in former years. These accumulations are still quite important, amounting, it is claimed, to over 2,000,000 gallons. But less than a third of the shipments to the United States are made by houses that have refused to renew their supplies by purchasing or concocting the new brandy, which is, in the majority of cases, necessarily falsified. A very large part of the brandy we receive from France is this falsified article, and, in my opinion, not more than one-third of it can be regarded as above suspicion. Not a week passes without shipments to New York or Boston of brandy which is delivered in the cask, all expenses paid, on board the steamer at Havre or Bordeaux, for less than the genuine article costs here. During the present quarter, for instance, many shipments have been made at 175 to 180 francs the hectoliter of 22 gallons, while no brandy, even the so-called "1881," is sold at less than 205 francs by the rural proprietors.

In case of prices like the above there is not the least room for doubt, all the disinterested authorities whom I have consulted here being unanimously of the opinion that an article furnished on such terms cannot contain a drop of genuine brandy. In fact, I do not understand the merchants to sustain a different view; they only say that their American customers demand an article at a given price and that they furnish it as required.

The greater part of the shipments, however, especially from Cognac, are at prices calculated to inspire confidence. But unhappily this test is quite insufficient; for within the last three years the brandy trade has undergone a complete transformation. Even the merchants who honestly desire to purchase a pure article, and who profess to have done so, cannot be sure that they are not deceived. As is probably well known, these merchants do not generally distill brandy themselves. They buy it of the proprietors of the vineyards, each one of whom has a still. Now these latter have become extremely skillful in the manipulation of the alcohol and the drugs of which the brandy of to-day is made, as I have learned from conversations with the mayors and curés of the rural communes. A priest inhabiting a little village in the "Grand Champagne" country, and perfectly conversant with the subject, said to me:

> There is no business in the world in which fraud is more universal or more successful. Our country people have become more than a match for the merchants.

The designation under which the merchandise is delivered to the public is a still less satisfactory safeguard against falsification. Merchants now deliberately *make* brandy of any year required or of any quality. The mention of the years 1849 or 1876, for instance, in an invoice or on the label of a bottle, may be regarded with perfect assurance as having no further meaning than that the article in question is presumed to have the taste or color of the brandy produced in the year mentioned. The same remark may be made in reference to the popular designations, "Cognac," "Fine Old Cognac," and especially "Fine Champagne."

METHOD OF FALSIFICATION.

The greater part of the brandy of to-day is prepared from alcohol obtained from grain, potatoes, or beets. Coincident with the failure of the white wine was the appearance of large quantities of alcohol in the

ports of the Charente, the most of it coming from Germany. This importation increases from year to year, and is to-day 46 per cent. greater than in 1880. Whoever will take the trouble to look may see barrels of this German alcohol piled up in the store-houses of the merchants. A simple process of reduction and admixture of drugs, a little pure brandy or the dregs of wine to give the brandy taste, and the color of the "wood," ordinarily suffice, with the brand of Cognac, to create a beverage which finds a ready sale in foreign countries. It is becoming the custom to sell this brandy in twelve-bottle cases, marked with one, two, or three stars, according to the presumed quality of the article, thus avoiding any compromising mention of year of production or region of origin. Some merchants, or rather manufacturers, after properly mixing the ingredients, pass the whole through the still. Others import the small raisins from the East and obtain a beverage called brandy from their juice, at least one such establishment being in operation at Cognac.

IMPURE BRANDY DANGEROUS.

The beverage called brandy or eau-de-vie, manufactured from the German alcohol which is brought here by the cargo on steamers from Hamburg, is an active poison. This alcohol, known to the trade as *trois-six* (three-six), is of 90° strength, and is sold here at a little less than 3 francs a gallon. The superior alcohol of the south of France sells at upwards of 5 francs per gallon. The cheap imported spirit, diluted, colored, and flavored, is making serious ravages in France, especially among the working classes. It is the favorite beverage of the artisan and peasant, while absinthe is preferred by the intemperate among the rich. It is difficult to say which is the most deadly in its effects. There is no reason to suppose that this spurious eau-de-vie loses anything of its toxic qualities by being exported, as much of it is, to the United States under the name of "Cognac." Its characteristic effect is to produce an intoxication in which the patient is especially inclined to rage and physical violence, while hopeless insanity is the inevitable consequence of persisting in its use, even for a relatively short period of time. These are of course in some measure the ordinary effects of intemperance and of habitual intoxication, however produced, but the alcohol in question has in addition to the ordinary exciting qualities of other stimulants a specific tendency to excite to violence and madness.

I have the less hesitation in speaking so confidently of these effects as characteristic, because of several cases which have fallen under my own observation of persons who had for a short time only been addicted to the use of cheap brandy and who had become habitually violent and dangerous. Moreover, it is this beverage which is filling with its victims the asylums for the insane in this country, where it is popularly supposed that intemperance is almost unknown. This may have once been so, but at present the visible effects of intemperance are not more striking even in the United States than in this "wine-producing" country. The director of a very important asylum for the insane tells me that *the greater part* of his patients, women as well as men, owe their mental condition to the use of stimulants, that is to say, of eau-de-vie and absinthe, which is a kind of brandy flavored with wormwood. As cheap but healthful wine disappears, of which the laboring classes used to drink one or two quarts each day, the pernicious eau-de-vie takes its place. To show that I do not exaggerate the serious nature of its

effects, I translate the following paragraph, which appeared in the Figaro, the well-known Paris newspaper, on the 16th day of April last:

During the last four days of the week which has just passed there have been received at the infirmary of the prefecture of police *seventy* persons who had become insane. Never before had so large a number been received. And to what do you suppose the doctors attribute this increase of insanity among the Parisians? To the abuse of alcoholic beverages!

EXCLUSION JUSTIFIABLE.

All French brandy might properly and perhaps ought to be excluded from the United States on sanitary grounds. There is a strong presumption against the purity of a very large part of it, and it is unfortunately almost impossible to detect the fraud by chemical analysis, especially where the various mixtures now employed are passed through the still. The reputation of a few great houses that now place on the market only what they draw from their own stocks, accumulated before 1879, might be a sufficient guaranty of the purity of their merchandise. But even with respect to them it may be said that they dose their brandies with caramels and other substances in order to adapt them to the taste of their English and American customers. They would never venture to send to the United States a strictly pure brandy as it comes from the still, for our amateurs would regard it as a harsh and inferior and perhaps falsified article. In any case, these houses could hardly be excepted by name from the operation of such measures as might be taken to protect the public health. A general measure, excluding the article entirely, would seem, therefore, to be the only effective defense against the admission of a poison for which our people pay one or two million dollars a year, besides the import duty, which, in case of the impure article, is over 100 per cent. of its invoice value.

GEORGE GIFFORD,
Consul.

UNITED STATES CONSULATE,
La Rochelle, June 5, 1882.

TRADE OF NEW SOUTH WALES WITH THE UNITED STATES.

REPORT BY CONSUL KAHLO, OF SYDNEY.

The terms on which merchandise is purchased here from manufacturers or others in the United States depend on whether an agent is employed or whether the purchase is made direct. If an agent is employed either in New York or Boston, he will purchase the goods for cash and draw on Sydney for the cost at about sixty days, adding his commission, interest, and exchange. If the purchase be made direct, the terms of payment would be a matter of agreement between the manufacturer and purchaser. Certain lines of goods are sold at various rates of *discounts off list prices*. These discounts vary according to the market value of the goods when purchased.

In selling goods in this colony, unless a quotation is made stipulating "*net cash*," it is usually understood that the amount is payable in four months, and a discount of 2½ per cent. is allowed for cash at time of sale. There are no bounties of any kind allowed on any exports from the United States to Australia. The purchaser pays his agent a com-

mission varying from 2½ per cent. to 5 per cent., according to the class of goods. I am not aware whether the agent gets any commission from the manufacturer. The usual expenses in connection with goods purchased in the United States and exported to these colonies are as follows: Commission to agent; railway freight and charges (in cases where the goods come from the interior); lighterage or cartage to vessel; wharfage; primage; cooperage, in cases where packages require repair before being stowed on board. These are usually paid by purchaser of the goods, and are either added to the amount of draft or are included in the shipper's charges or bill of lading.

Vessels come direct from New York or Boston to the various principal ports of the colonies in Australia, but should goods be shipped from New York or Boston, to, say, Brisbane via Sydney, as is sometimes the case, the ship agents in America will quote a through rate of freight, and their agents here will attend to the transshipment and pay all charges, which will be provided for in the rate quoted.

Before closing this report I desire to make a few remarks with regard to one particular article of trade in which I believe, under proper and careful management, a very large and profitable business might be carried on. I allude to furniture, as the manner in which it is produced in the Australian colonies is very far behind the times and prices. With the exception of iron and brass bedsteads (which alone are used, and are imported from England), almost all the furniture used in the colonies is imported from Germany. The only furniture imported from the United States is of a very inferior description, and people are erroneously led into the belief that such is a fair sample of American produce; hence there has arisen no demand for it. The plan I would suggest would be for any large firm to establish an agency in Sydney, and that a depot be opened here where goods could be exposed for sale; also, that the goods be sent out in their natural state, or rather in pieces, and finished here. The reason for this latter suggestion is principally on account of the freight, which for goods made up would be very high, because of the bulk, and also because goods made up would be so likely to be damaged in transit.

In conclusion I may say that I know of parties in this colony who would be glad to join in this enterprise.

CHARLES KAHLO,
Consul.

UNITED STATES CONSULATE,
Sydney, N. S. W., March 31, 1882.

GERMAN PROHIBITION OF AMERICAN PRODUCTS.

REPORT BY CONSUL WILSON, OF BREMEN.

I transmit herewith copies of two laws enacted by the German Empire, with translations, the first, under date of February 26, 1875, prohibiting the importation of American potatoes, clippings, or peelings of the same; the second, under date of June 25, 1880, prohibiting the importation of hog meat in small quantities and of sausage of all kinds from America. These laws are being strictly enforced in all the seaports of Germany, and I deem it proper to inform the Department of the fact, in order that the same may be made public if desired.

It is the custom of many persons coming from the United States to

Germany to bring with them small quantities of potatoes, hog meat, and especially sausage, to be used on the voyage and as presents to their friends in this country. Upon their landing in any of the ports of Germany, if any of the aforementioned articles are found among their effects, the same are confiscated, and the party having the same is held for trial for violating the law, the penalty for which is a fine of from $1 and costs up, in proportion to the amount of the prohibited article seized. The delay and detention of the party caused thereby is often very annoying. Almost every steamer arriving in this port from the United States brings persons who, not knowing the provision of the laws referred to, have with them some or all of the prohibited articles, which upon their landing the same are the source of much trouble and annoyance to them. Persons who may desire to bring these articles with them for use on the voyage should not attempt to land them upon their arrival here.

JOHN M. WILSON,
Consul.

UNITED STATES CONSULATE,
Bremen, May 15, 1882.

[Translation.]

No. 1061.

Decree of February 26, 1875, regarding the prohibition of the importation of potatoes and of clippings (peelings of the same) and packing materials used from America.

We, William, by the grace of God Emperor of Germany and King of Prussia, &., decree in the name of the German Empire, with the consent of the federal council, as follows:

§ 1. The importation of potatoes from America, as well as of peels and other clippings of such potatoes, further of bags or other articles which have been used for packing or keeping of such potatoes or potato clippings is, until further orders, prohibited. This decree does not apply to potatoes which arrive here as ship-provision, and which are not taken from on board the vessel.

§ 2. The above decree will take effect on the day of its publication.

Witness our own handwriting and imperial seal.

Done, Berlin, February 26, 1875.

[L. S.] WILLIAM.

Prince BISMARCK.

[Translation.]

No. 1388.

Decree of June 25, 1880, regarding the prohibition of the importation of hog meat and sausage from America.

We, William, by the grace of God Emperor of Germany and King of Prussia, &c., decree in the name of the Empire, with the consent of the federal council, as follows:

§ 1. The importation of hog meat which is chopped, or which is otherwise prepared in small pieces, and of sausage of all kinds, from America, is prohibited until further orders. This decree does not apply to the importation of whole hams and sides.

§ 2. The imperial chancellor is authorized to allow exceptions to this decree and to make rules for carrying out the same.

§ 3. The above decree will take effect on the day of its publication.

Witness our own handwriting and imperial seal.

Done, Bad-Ems, June 25, 1880.

[L. S.] WILLIAM.

Prince BISMARCK.

TRADE BETWEEN THE UNITED STATES AND COLOMBIA.

REPORT BY CONSUL SMITH, OF CARTHAGENA.

Three years ago but five ocean steamers entered and cleared this port monthly. Of these but one was engaged in the trade between the United States and Colombia.

An American schooner put in an appearance three or four times yearly. At that time the imports from the United States consisted mainly of flour and kerosene, the potatoes and onions and other provisions coming from France and Germany. The lines of steamers then running were the Royal Mail Packet and intermediate boats, the former carrying passengers and mails and the latter carrying cargo; the Liverpool and West Indian, limited, passengers and cargo; and the Atlas line, carrying passengers and cargo. The first two named lines were engaged in the European trade, and the Atlas between the Colombian ports and New York.

Owing to the rapid extension of commercial relations between our country and Colombia, the Atlas Company began to make serious inroads into the European trade. This extension was chiefly due to the Colombians awakening to the fact that the United States was a better selling and purchasing market than those of Europe. They were advised to make trial shipments to the United States and compare the results of same with similar shipments to European ports. The comparison was invariably in favor of our country, as regards the quickness of dispatch, better markets, and quicker returns. It had been so persistently drummed in their ears by English, French, and German representatives that the United States only "manufactured flour and produced kerosene," that the majority of them were disposed to credit such absurd statements.

As the Atlas line began to prosper new steamers were constantly added to its fleet, and, like all monopolies, it became grasping, indifferent to the wants of its patrons by charging an enormous freight and passenger tariff, and suiting its own convenience in calling at the port. So a line of American schooners—not steamers (who ever hears of a line of American steamers in these days?)—was established in opposition, and actually took one-half of the freight away from this British company. Finally, the steamer company became alarmed, reduced its tariff, and called three times monthly, instead of once as it had done previously. Of course the poor little sail line was soon swallowed up.

With great satisfaction have I the honor to announce the establishment of an opposition line of steamers between Colombian ports and New York, by the well-known American firm, A. C. Lombard's Sons, of Boston and New York, under title of the "North and South American Steam Navigation Company." Although it is strictly an American enterprise, the company is, owing to its inability to secure American steamers already built, running chartered boats under foreign flags. I am assured, however, of its intention to contract immediately with American builders for construction of steamers especially adapted for the trade. The line has been in operation two months, and is so well patronized by American and Colombian shippers that its permanent success is assured. The American line has already compelled the British company to come direct to Colombian ports instead of stopping, *en route*, at the West Indian ports, and has also reduced freight tariff 50 per cent. With a view to head off the American line, the British company has entered into a contract with this state government to place on a line of river steamers between here

and Honda, the head of navigation of the Lower Magdalena River, via the Dique Canal, which connects this port with the said river. The state government agrees to pay an annual subsidy, amounting to about $50,000, for the period of five years. One year is allowed for the Atlas Company to put their boats in running operation. This company proposes to give through bills of lading, between Honda and New York, or any European port by the way of New York. The navigation of the Dique, however, is free to all, and any other company has the liberty to place on a line of steamers at any time.

Another port besides New York is turning its attention to this rich field of commerce, namely, New Orleans, and her merchants are going about it in a practical and methodical manner. The pioneer steamer of the New Orleans, Central, and South American Line (S. and J. Oteri, managing owners) is expected, daily, to arrive from New Orleans. I am reliably informed the steamer will bring a number of manufacturers and merchants from Saint Louis, Chicago, Cincinnati, Indianapolis, Kansas City, Louisville, Pittsburgh, Atlanta, Memphis, and New Orleans, who have taken passage with a view of looking into the requirements of the trade of this and other ports and also the general wants of Colombia.

Messrs. Oteri Brothers were compelled to have the first ship built in England, as the American yards were working on previous orders. It is their intention, however, to have the other vessels of their line built in America.

Commercial treaties having been established between Spain and Colombia, two Spanish lines, the Martinez Campos and Transatlantic Companies, have made Carthagena, Savanilla, and Aspinwall ports of call for their respective steamers. The former company is subsidized by the Spanish Government. I am of opinion, however, that Spain has taken this step towards regaining her former commercial sway in these waters too late. She lost the golden opportunity by not acknowledging the independence of Colombia fifty years ago.

Already the United States of America, in spite of united European opposition—and I may here state that this opposition has unscrupulously resorted to every means, underhand and aboveboard, to prevent them from securing a commercial foothold on this coast—head the list of imports and exports. Moreover, I am proud to state that our country having gained this foothold will, from the present indications, undoubtedly enlarge and extend her commercial relations. The rapidity of this extension, however, rests with the American manufacturers and producers.

The following is a list of the various steamship companies now sending their vessels to this port, viz:

Royal Mail, four times monthly.

West Indian and Pacific Steamship Company (limited), two times monthly.

Harrison line, monthly.

New Orleans, Central and South American, monthly.

Spanish Transatlantic, semi-monthly.

Martinez Campos (Spanish), semi-monthly.

Bueno & Co. (Cuban), tri-monthly.

Atlas Steamship Company (British), semi-monthly.

North and South American Steamship Company, semi-monthly.

EDMUND W. P. SMITH,
Consul.

UNITED STATES CONSULATE,
Carthagena, Colombia, May 11, 1882.

AMERICAN IMPORTS INTO GERMANY.

REPORT BY CONSUL CANISIUS, OF GEESTEMUNDE.

The old saying that figures do not lie is true enough, and, for those concerned in political economy, the recently published statistical report of the Imperial Government on the commerce of Germany is of great interest, as from it may be deduced the state of the country's prosperity and civilization, as well as its future condition. The leading statesmen of every nation endeavor to bring their own country to such a point of excellence in commerce and fine arts that their wares may be sought in the different markets of the world. To bring about this result it is asserted by some that free trade is the correct principle. Others believe that a protective tariff is the panacea. But as eminent men of all nations are divided in opinion on this subject, and as both sides have strong arguments in favor of their theories, the day is still distant when one or the other will be definitely adopted by the principal commercial nations. For a considerable time past, England has been making experiments as to the value of free trade. This system will in all probability continue in operation, for the result has been too beneficial to permit a change being made, and even the reciprocity idea, though of late years having had many supporters, has fallen on sterile ground. Germany had for a long time followed Great Britain's example, for the import duties of the former were so slight that it might almost have been said that Germany enjoyed free trade, until 1879, when Prince Bismarck changed his free-trade opinions to radical protective, reiterating the opinion of our protectionists, that the prosperity of the United States was due to the high protective tariff, under which all the different branches of our manufacturing interests have risen to such eminence and perfection, rendering it impossible to compete with the great Republic in many of them. The great majority of the people was, however, in favor of free trade, so that Bismarck required all his tact to bring about a union of the different factions in order to be able to pass the law of 1879. The new national policy has now existed a little over two years, long enough, according to the free traders, to make the necessary experiments, and they think that it has been detrimental to the mass of the people. They assert that everything must be paid for at a higher price than ever by the working classes, who can least afford it; and what is not to the benefit of the greatest number of the citizens of a state, should not be introduced by those who make the laws. In consequence of this the chancellor has not been able, like Mr. Gladstone, to procure an absolute majority upon which to rely in every instance. But in spite of this there is no near prospect that the tariff adopted in 1879 will be reversed or even modified.

Should Bismarck succeed in making tobacco a government monopoly, many commercial men believe that it would act very detrimentally on the tobacco trade of the United States with this country. This trade is very large, and on the increase. Last year it amounted to 19,336,062 kilograms, which is an increase of 1,431,537 kilograms over the year preceding it.

In drawing deductions from certain facts noticeable in the German statistics of imports and exports, the conclusion is inevitable that the increased import tariff of the empire has very materially affected cer-

tain articles brought chiefly from our country to German ports. For instance, the import of grain decreased during the year 1881, 116,213 marks; pork, 2,398,959 kilograms; lard, 9,990,150 kilograms; petroleum, 48,957,654 kilograms; and manufactures in which we had gained quite a brisk trade with Germany have also materially decreased. Tobacco increased 1,431,537 kilograms; cotton (raw) increased 25,786,756 kilograms. I subjoin a comparative statement of the principal articles imported and exported by the German Empire during the years 1880 and 1881:

Articles imported into Germany during the years 1880 *and* 1881.

Articles.	1880.	1881.
	Kilograms.	*Kilograms.*
Cotton	79,302,074	105,088,837
Coffee	6,835,292	8,899,834
Grain (*tons*)	245,137	193,541
Resin	1,214,394	1,810,900
Petroleum	207,964,674	159,017,020
Rice	155,889,111	185,199,844
Lard	20,208,360	10,218,210
Pork	7,019,683	124,551
Tobacco	266,211,821	36,639,663
Tobacco stems	6,314,472	6,056,981
Train oil	314,110	306,207
Sugar (raw)	44,631,145	40,482,709
Sugar (refined)	3,134,496	3,488,165

Articles exported from Germany during the years 1880 *and* 1881.

Articles.	1880.	1881.
	Kilograms.	*Kilograms.*
Cotton	98,642,851	103,878,831
Coffee	4,992,496	6,812,799
Grain (*tons*)	195,214	180,030
Resin	787,599	1,833,884
Petroleum	163,912,660	171,95·,882
Rice	105,072,029	117,317,052
Lard	17,985,444	10,741,189
Pork	6,735,900	8,278,684
Tobacco	27,595,744	29,955,220
Cigars	*38,758	40,216
Train oil	334,597	262,755
Sugar (raw)	44,321,262	40,073,748
Sugar, refined	1,240,512	1,578,439
Tobacco stems	3,099,551	4,237,507

PETROLEUM.

In former reports I have taken occasion to refer to the vast importation of petroleum from the United States to the ports of Geestemunde Bremerhaven, and also communicated to the State Department the successes of the recently discovered petroleum in the Linneberger Heath, which created such an excitement throughout Germany. It was believed at the time, and stated in the newspapers, that Germany would henceforth free herself of her dependence upon the United States for this article, for which millions of marks have to be remitted to our country every year. I am now able to state that my prediction has been fulfilled, for the undertakings in that part of the country have almost ceased in producing petroleum. The chief reason for this is probably

that the oil produced there is much inferior to the article imported. The refined petroleum of Oelheim was put in the market here and tried, but consumers, after one trial, gave it up. This result was attained wherever it was sold, and consequently the reaction in the Linneberger Heath petroleum industry was so great that most of the companies have given up operations in their industry. The enthusiasm of last summer disappeared, and the stocks of the companies could not be sold, even at a heavy decline. The creditors of these concerns finally concluded to demand a liquidation, and this seemed the final closing up of the great petroleum companies in that region. The company with which a certain Mr. Mohr was connected, and which it is said a Berlin bank bought up, decided to call a meeting of the stockholders to determine the dividends for the first half year. The majority concluded to pay 6 per cent. This decision is, however, considered as a mere speculation on the part of those most interested to bull the stocks of the company, and then immediately to dispose of them, Nineteen of the stockholders impeached the legality of the meeting. The Oelheim Petroleum Industry Company, in order to show that the production of petroleum was not as bad as it was represented in the papers, published the interesting statement which I subjoin:

The society worked three pits, with an average daily yield of 10 to 12 barrels; six pits, with an average daily yield of 15 to 18 barrels; eight pits, with an average daily yield of 15 to 18 barrels; one pit, with an average daily yield of 5 to 6 barrels; two pits, with an average daily yield of 5 to 6 barrels; five pits, with an average daily yield of 5 to 8 barrels; nine pits, with an average daily yield of 15 to 20 barrels; eleven pits, with an average daily yield of 15 to 20 barrels.

According to this statement the total production during the three weeks of observation was from 85 to 98 barrels per day, not including well 13. The price per barrel of the raw material was between 18.05 marks and 21 marks. The expenses, the report says, cannot be given accurately, but can only refer to the amortization of the boring towers. The Berlin Gazette declares, however, that this statement must be taken with reserve.

Although the oil fever rose to an unprecedented height last summer, it was easily foreseen that it would, in a short time, subside to its present dead level. As far as I know the stocks have entirely disappeared from the market. The fervent hopes of German patriots of driving the "blue-barreled Yankees" from the vast petroleum stores at Geestemunde, Bremerhaven, and other places, have not been realized, and probably will not be for a very long time. The losses which the investors suffered through Oelheim companies have warned the people in this country that it is just as unsafe to invest in petroleum industries in Germany as in Galicia or in Russian Poland. Even raw petroleum is brought over here, as the arrival of the American ship Regina Tolck laden with this material shows. This proves that the Oelheim article even when raw is not as useful as the American. As evidence that the Oelheim petroleum industry is on the decline, the fact may serve that the thousands of empty petroleum barrels, bought up for future use at Oilheim, were recently sold to Bremerhaven firms that ship such barrels to New York, Philadelphia, and Baltimore.

As indicated by me, there was a decrease in the importation of refined petroleum into Germany during the year 1881 to the amount of 48,957,654 kilograms. This may have been caused by a higher import duty, by the excitement over the newly-discovered oil-wells in Hanover or by speculation. I am inclined to believe that the latter was the cause.

I subjoin a statement of the total number of barrels of petroleum on hand at the different places at the end of the last quarter:

	Barrels.
Bremen	481,296
Hamburg	74,399
Antwerp	284,189
Rotterdam	42,825
Amsterdam	75,466
Stettin	48,090
Dantzig	31,765

I have stated that barrels containing petroleum which at 21° Reaumur develops inflammable gases, should be marked "inflammable," in white on a red ground. In quantities of less than 50 kilograms it is requisite that they should be marked: "To be used for lighting only, with particular care." The investigation to be made with Able's petroleum-testing machine. This law, to which many chambers of commerce objected, will come in force on June 1, 1883.

THEODORE CANISIUS,
Consul.

UNITED STATES CONSULATE,
Geestemunde, March 31, 1882.

ADULTERATION OF AMERICAN COTTON.

REPORT BY CONSUL-GENERAL STANTON, OF ST. PETERSBURG.

At the request of a cotton-broker of this city, Mr. C. F. Heissler, I recently inspected 19 bales of cotton, forming part of a parcel of 200 bales sold by said C. F. Heissler to Messrs. S. W. Golenischtscheff's heirs, at the works of the latter firm in this city.

I granted Mr. Heissler a certificate in strict accordance with the facts as disclosed by the inspection, and transmit a copy thereof herewith.

All the bales contained more or less sand; but, not being an expert, I am unable to state whether the amount of sand was unusually great or not. Those bales, however, which are specified in the accompanying inclosure were beyond all doubt maliciously weighted for fraudulent purposes.

I am glad to be able to state that this is the first case of adulteration known to this consulate-general, and that inquiries made at other spinning-mills lead me to believe that adulterations are rare; although, as most spinners buy on guarantee as to quality, instances occurring may not be reported.

I am also informed that cheap cotton is more likely to be weighted than higher-priced goods.

In the present case bales C. D. No. 25, W. O. X. No. 67, and S. O. R. 93, had each a layer of sand and dirt packed in the center of the bale and extending from end to end, whilst bales R. O. G. 131 and 72, and C. D. 65, had each two such layers, whose weight in one instance, C. D. 65, was about 48½ pounds English.

These bales were all opened and examined and all the weights were taken in my presence, and although I am wholly unacquainted with the

cotton trade, I have no hesitation in stating that a desire to defraud the final purchaser was the prime motive of the packers of said bales.

EDGAR STANTON,
Consul-General.

CONSULATE-GENERAL OF THE UNITED STATES,
St. Petersburg, May 20, 1882.

UNITED STATES CONSULATE-GENERAL, ST. PETERSBURG.

I, the undersigned, consul-general of the United States of America at St. Petersburg, Russia, do hereby certify and make known to all whom it may concern that at the request of Mr. C. F. Heissler, of St. Petersburg, I have inspected 19 bales of cotton, which, according to the statement of the said C. F. Heissler, formed part of a parcel of 200 bales sold by him to Messrs. S. W. Golenischtscheff's heirs, of St. Petersburg, and have found them all to contain more or less sand, 9 of which, as specified below, having packed in the center of the bale, apparently placed there to increase the weight of bales, heaps of sand and dirt, as follows, viz:

Marks and numbers of bales.	Weight of sand and dirt therein.
	Poods.
CxD, $65	29 48
= $25	9 48
W. O. X., $67	23 36
R. O. G., $131	15 24
R. O. G., $72	26 24
S. O. R., $93	2 24
F. 01-N	1 12
Illegible	2 24

(1 pood = 36 lbs.)

In witness whereof I have hereunto set my hand and affixed the seal of this consulate-general at St. Petersburg this 15th day of May, 1882.

EDGAR STANTON,
Consul-General.

AMERICAN TRADE WITH HAVRE.

STATEMENT PREPARED BY CONSUL GLOVER SHOWING THE DIRECT IMPORTS INTO THE PORT OF HAVRE, FRANCE, FROM THE UNITED STATES, DURING THE QUARTER ENDING MARCH 31, 1882.

Agricultural implements	packages..	4,912
Apples	barrels..	10
Apples, dried	cases..	800
Absinthe	cases..	40
Antiquities	cases..	2
Baking powder	cases..	2
Bark	sacks..	1,435
Bark	bales..	37
Beef	cases..	30
Beef	barrels..	27
Bones	sacks..	790
Bulbs	barrels..	15
Cattle hoofs	sacks..	276

Carriages	cases..	15
Cedar wood	logs..	1,013
Chinaware	packages..	7
Cigars	case..	1
Cigarettes	cases..	4
Clover seed	sacks..	27,458
Crucibles	hogsheads..	21
Coal	barrels..	51
Cocoa	sacks..	1,799
Coffee	sacks..	23,534
Coffee	barrels..	51
Confectionery	cases..	3
Congress water	cases..	10
Copper works	cases..	2
Cordials and liquors	cases..	61
Cotton	bales..	142,613
Cotton goods	cases..	3
Cotton seed oil	barrels..	2
Copper	pieces..	291
Demijohns, empty		7
Drugs	barrels..	40
Drugs	cases..	20
Embroidery	case..	1
Emery grindstones	cases..	2
Feather dusters	cases..	39
Flags	case..	1
Flour	sacks..	775
Flour	half barrels..	10
Fruits and vegetables	sacks..	438
Fruits and vegetables	cases..	64
Fruits and vegetables	barrels..	6
Furniture and effects	cases..	43
Gayac wood	pieces..	25
Grease	tierces..	103
Grease	case..	1
Gold dust	case..	1
Guano	package..	1
Hair rope	bales..	62
Hams	packages..	279
Handles	cases..	147
Handles	packages..	20
Hardware	packages..	235
Harness	case..	1
Hemp	bales..	684
Hides, dried		3,599
Hides, dried	bales..	6
Hides, salted	packages..	905
Hides		712
Horsehair	bales..	7
India rubber	bales..	59
Indigo	packages..	11
Iron casks, empty		256
Jewelry	case..	1
Intestines	barrels..	97
Intestines	tierces..	74
Kid skins	bales..	145
Lampblack	barrels..	100
Lard	tierces..	30,126
Lard	tubs..	10,150
Lard	packages..	5,711
Lard oil	barrels..	172
Laurel water	barrel..	1
Lobsters	cases..	120
Lumber	planks..	4,130
Lumber	tons..	100
Leather straps	packages..	64
Machinery	cases..	100
Mackerel	packages..	3
Mahogany	logs..	33
Mahogany	forks..	30

Maple sirup	cases..	4
Maple wood	logs..	517
Meat, preserved	cases..	562
Mercury	cases..	6
Millet seed	sacks..	130
Miscellaneous goods	packages..	221
Moss	cases..	3
Nails	cases..	39
Naphtha	barrels..	5,967
Nickel	case..	1
Nut wood	logs..	164
Oars		1,510
Oatmeal	cases..	2
Oil	casks..	1,579
Oil	cases..	247
Oysters	cases..	148
Paint	barrels..	20
Paintings	cases..	4
Paper pulp	packages..	1,031
Pearls	case..	1
Petroleum	barrels..	46,329
Photographies	case..	1
Pigs' bristles	bales..	110
Phosphate	tons..	390
Plants	cases..	10
Platina	box..	1
Pork, salt	cases..	2,316
Poplar	logs..	377
Pork	barrels..	230
Potash	barrels..	116
Preserves	cases..	604
Provisions	packages..	12
Pumps	packages..	27
Rice	barrels..	19
Rice roots	bales..	100
Rum	packages..	15
Sand paper	packages..	22
Satin wood	pieces..	80
Scales	case..	1
Seeds	sacks..	218
Seeds	cases..	103
Seeds	barrels..	2
Seed-corn	sacks..	200
Sewing machines	cases..	1,374
Shovels	cases..	5
Shells	sacks..	22
Shoes	case..	1
Silk	bale..	1
Silk-worms' eggs	cases..	1,268
Silk waste	bales..	3
Silverware	case..	1
Skins (dried)	bales..	2,262
Sponges	bales..	158
Starch	packages..	100
Stationery	cases..	8
Staves		142,634
Springs	case..	1
Sugar	barrels..	3
Sirup	barrels..	7
Straw	cases..	15
Tallow	tierces..	530
Time-pieces	cases..	5
Tobacco	hhds..	1,720
Tobacco	cases..	4
Tortoise-shell	barrels..	6
Tortoise-shell	case..	1
Treacle	barrel..	1
Type, and accessories	cases..	3
Toys	cases..	4
Varnish	cases..	200

Vegetable horsehair	bales..	32
Vermouth	cases..	65
Vine-plant roots	cases..	189
Wind-mills	cases..	12
Whalebone	packages..	589
Whale oil	casks..	79
Wheat	sacks..	745,762
Wheat	tons..	600
Wheat	cases..	2
Whisky	barrels..	8
Whitewood	logs..	8
Wine	cases..	155
Wine	cask..	1
Wooden goods	packages..	18
Bird skins	cases..	4
Cod-liver oil	barrels..	2
Feathers	cases..	2
Linseed meal	sacks..	250
Pharmaceutical products	packages..	18
Indian corn	sacks..	15,187
Indian corn	tons..	1,075
Indian corn	bushels..	8,650
Indian corn	barrels..	9

JOHN B. GLOVER,
Consul.

UNITED STATES CONSULATE,
Havre, March 31, 1882.

EXPORTS TO THE UNITED STATES FROM PORTO RICO.

REPORT BY CONSUL CONROY, OF SAN JUAN.

Herewith find a statement of the exports from this port during the month of April, 1882, with a few remarks regarding the sugar, coffee, and tobacco crops, &c. As far as exportation to the United States is concerned, these figures can be considered correct, as they are taken from the books of this consulate, but I cannot likewise warrant the accuracy of the quantities of produce exported for other points, as it is difficult to obtain reliable information here, the custom-house officials putting as many difficulties in the way as they possibly can, and after all one can only procure an incomplete or unreliable statement.

EXPORTS TO THE UNITED STATES.

SUGAR.

To New York.—Per steamers under British flag, 3,604 bags (centrifugals), 1,330 hhds.
To Boston.—Per British steamer, 193 hhds; by sailing vessel, 24 hhds.
To Portland.—By sailing vessel, 215 hhds.
Total of sugar, 3,604 bags, 1,762 hhds.

MOLASSES.

To New York.—Per British steamer, 241 puncheons.
To Boston.—By sailing vessels, 282 puncheons.
Total of molasses, 523 puncheons.

SATINWOOD LOGS.

To New York.—Per British steamer, 306.

The total value, including charges, of above exportation amounts to $187,004.63.

Furthermore, the following exportations of sugar have been made, viz:

For Europe.—British Channel f. o. by Swedish sailing vessel (centrifugals) 83 hhds.

To Halifax, N. S.—By British vessel, 1,148 bags, 10 hhds.

Total, 1,148 bags, 93 hhds.

Under the influence of favorable weather for sugar-making all over the island, planters are availing themselves of it, and stocks of said produce are fast accumulating at the outports, tonnage being, for the moment, comparatively scarce.

The coffee crop is drawing to a close, still, from all accounts, there are yet some 15,000 quintals in this district for shipping. None of this berry has been exported lately to the United States, the bulk of the crop having been shipped to ports in the Island of Cuba and the balance to Spain and other European ports. The current price ranges from $12 to $12.50 for those classes suitable for Cuban markets, while the better qualities for Europe bring higher prices.

Tobacco.—The crop, consisting of about 25,000 quintals of the inferior quality called "Boliche," of which there only remains unshipped some 1,500 quintals, has been already exported to Spain for account of the government contract; average price, $5.75 per quintal. The superior classes of the leaf (quantity I have not been able to ascertain) have been shipped to Havana at much higher prices, according to quality and assortment.

Hides are also exported from here, but almost all are shipped to Spain.

EDWARD CONROY,
Consul.

UNITED STATES CONSULATE,
San Juan, Porto Rico, April 30, 1882.

PRICES IN GERMANY.

REPORT BY CONSUL-GENERAL VOGELER, OF FRANKFORT-ON-THE-MAIN, ON THE PRICES OF LEADING ARTICLES OF MERCHANDISE IN THE EMPIRE OF GERMANY IN APRIL, 1882.

The following tables show the prices of leading articles of merchandise in the German Empire during the month of April, 1882, as published by the Imperial Bureau of Statistics, reduced to American weight and coin. It is believed that the information contained in these tables is of interest at this time, inasmuch as an increased movement of breadstuffs and other products from American ports to foreign countries seems to have commenced in anticipation of an abundant harvest in the United States.

FERDINAND VOGELER,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
Frankfort-on-the-Main, June 14, 1882.

Average wholesale prices of leading articles of merchandise in Germany in the month of April, 1882.

I.—WHEAT PER 100 POUNDS.

No.	Locality.	Condition.	Price.
1	Berlin	Good, sound, yellow	$2 50
2	Breslau	Medium	2 30
3	Cologne	Rhenish, faultless	2 63
4	Danzig	Mixed	2 29
5	Frankfort-on-the-Main	From various countries	2 77
6	Halle-on-the-Salle	Domestic, sound, country production	2 41
7	Königsberg	Good, mixed	2 29
8	Leipsic	German, good, sound	2 52
9	Lindau	From various countries	2 72
10	Magdeburg	Country	2 44
11	Mannheim	American, Russian, German, Hungarian, medium	2 73
12	Munich	Bavarian, prime	2 67
13	Posen	Good, sound, average	2 29
14	Stettin	Inland, Roumanian, and Hungarian, average	2 43
15	Stuttgart	Russian, Hungarian, Bavarian, good	2 83
		General average	2 52

II.—RYE PER 100 POUNDS.

1	Berlin	Good, sound, average	$1 71
2	Bremen	Nikolajeff-Odessa, good, sound	1 64
3	Breslau	Good, sound	1 67
4	Cologne	Rhenish, faultless	2 03
5	Danzig	Holland	1 64
6	Frankfort-on-the-Main	From various countries	2 18
7	Halle-on-the-Salle	Domestic, sound, country production	1 84
8	Königsberg	Good, sound	1 59
9	Leipsic	German, good, sound	1 87
10	Lindau	Hungarian	2 27
11	Lübeck	Russian	1 74
12	Magdeburg	Medium weight	1 82
13	Mannheim	Medium, from all countries	2 08
14	Munich	Bavarian, prime	2 07
15	Posen	Good, sound, average	1 69
16	Stettin	Inland and Russian, average	1 69
17	Stuttgart	Bavarian and Würtembergian, good	2 18
		General average	1 86

III.—BARLEY PER 100 POUNDS.

1	Breslau	Medium	$1 42
2	Danzig	Large brewing, Prussian, Polish, Russian	1 43
3	Frankfort-on-the-Main	Domestic, and from the Wetterau	2 02
4	Halle-on-the-Sallo	Domestic, country, sound, medium	1 82
5	Königsberg	Light	1 87
6	Leipsic	German, good, sound	1 81
7	Lindau	Hungarian	2 10
8	Magdeburg	Chevalier	2 00
9	Mannheim	From Baden, Bavaria, Palatinate, Hungary, medium	2 16
10	Munich	Bavarian, prime	2 23
11	Posen	Good, sound, average	1 54
12	Stettin	Average of all kinds	1 55
13	Stuttgart	From Würtemberg, good	1 98
		General average	1 80

IV.—MAIZE PER 100 POUNDS.

1	Breslau	Medium	$1 63
2	Hamburg	American, mixed	1 61
3	Leipsic	American, good, sound	1 73
4	Stettin	American, Roumanian	1 64
		General average	1 65

Average wholesale prices of leading articles of merchandise in Germany, &c.—Continued.

V.—OATS PER 100 POUNDS.

No.	Locality.	Condition.	Price.
1	Berlin	Good, sound, average	$1 45
2	Breslau	do	1 46
3	Cologne	Rhenish, faultless	1 80
4	Frankfort-on-the-Main	Domestic	1 80
5	Halle-on-the-Salle	Sound, country, medium	1 74
6	Königsberg	Good, sound	1 37
7	Leipsic	German, good, sound	1 75
8	Lindau	Bavarian	1 90
9	Magdeburg	Medium, light	1 70
10	Munich	Bavarian, prime	1 96
11	Posen	Good, sound, average	1 56
12	Stettin	From various countries, average	1 54
13	Stuttgart	From Würtemberg, good	1 75
14	Mannheim	German, old and new, Russian, medium	1 72
		General average	1 69

VI.—POTATOES PER 100 POUNDS.

1	Berlin	Good, early red, distilling, unassorted	$0 24
		Good, sound, assorted, eating	30
2	Breslau	Good, sound, Silesian, eating	31
3	Magdeburg	Pale red, Saxonian, eating	24
		Distilling	20
4	Stettin	Sound, light red	31
		Sound, white	25
		Distilling	24
		General average	25

VII.—HOPS PER 100 POUNDS.

1	Nuremberg	Common, country	$17 52
		Lager-beer	24 00
		Superior lager-beer	31 68

VII.—FLOUR PER 100 POUNDS.

a. Wheat.

1	Breslau	Baker's brand, No. 00, exclusive of bag	$3 34
2	Cologne	Rhenish faultless, No 00, inclusive of bag	3 29
3	Halle-on-the Salle	Domestic, No. 00, exclusive of bag	3 67
4	Lubeck	German, No. 0, exclusive of bag	3 49
5	Munich	Bavarian, No. 2, exclusive of bag	2 95
6	Posen	Domestic, No. 00, inclusive of bag	3 33
		General average	3 51

b. Rye.

1	Berlin	Good, sound, No. 0-1, inclusive of bag	$2 39
2	Posen	Domestic, No. 0-1, inclusive of bag	2 62
		General average	2 50

IX.—RICE PER 100 POUNDS.

1	Bremen	Rangoon, table, hulled	$2 38
		Broken, No. 0	1 80
2	Hamburg	Japan, hulled, lowest quotations	3 49
		Rangoon, hulled, lowest quotations	2 02
		Broken, hulled, lowest quotations	1 74

Average wholesale prices of leading articles of merchandise in Germany, &c.—Continued.

X.—LARD PER 100 POUNDS.

No.	Locality.	Condition.	Price.
1	Bremen	Refined, American, Wilcox brand	$12 35

XI.—BACON PER 100 POUNDS.

1	Bremen	Salted American, half long, half short middles, clear	$11 26

XII.—COTTON PER 100 POUNDS.

1	Bremen	Middling, upland	$14 14
		Good, fair Oomra	10 20
2	Hamburg	New Orleans, middling	13 13

XIII.—WOOL PER 100 POUNDS.

1	Berlin	North German, medium	$34 81
2	Bremen	Washed Buenos Ayres, prime	46 31
3	Hamburg	Cape, extra superior, snow white	45 82

XIV.—HEMP PER 100 POUNDS.

1	Hamburg	Mexican, fiber	$8 78
2	Lubeck	St. Petersburg, pure	5 45

XV.—RAW SILK PER 1 POUND.

1	Crefeld	Milan organsin, classique, 18–20	$6 89
		China organsin, classique, 45–50	5 78

XVI.—RAW IRON PER 100 POUNDS.

1	Berlin	Best Scotch cast, No. 1, Longloan	$0 87
		English (Middlesborough), No. 3	71
2	Breslau	Puddle	74
		Cast	78
3	Dortmund	Bessemer, raw, from the district of the Ruhr	73
		Westphalian puddle, from the district of the Ruhr	68
4	Dusseldorf	Best German puddle	71
		Best German cast	82
5	Hamburg	Scotch, No 1	77
		Middlesborough, No. 1	64
6	Lubeck	Forged Swedish bar	2 46

XVII.—PETROLEUM PER 100 POUNDS, INCLUDING BARREL.

1	Bremen	American, white refined	$1 54
2	Danzig	American, white refined, duty paid	2 57
3	Hamburg	American, white refined	1 57
4	Stettin	do	1 59

Average wholesale prices of leading articles of merchandise in Germany, &c.—Continued.

XVIII.—COAL PER 100 POUNDS.

No.	Locality.	Condition.	Price.
1	Berlin	Westphalian, mixed for gas purposes	$0 19
		Upper Silesian	20
		Lower Silesian	19
		English nut, for smith use	18
2	Breslau	Lower Silesian, for gas	11
		Upper Silesian, for gas	7
3	Danzig	Double sifted English nut	14
		Scottish machine	14
4	Dortmund	Lump, for export	8
		Puddling	6
5	Dusseldorf	Gas and flame	8
		Fat and lean	7
6	Essen	Gas and flame	7
		Fat	6
		Lean	6
		Gas	8
7	Hamburg	Prime West Hartley, steam sifted	14
		Sunderland nut	12
		Double-sifted Westphalia nut	17
8	Saarbrück	Flame	9
		Fat	8
		General average	11

TRADE AND NAVIGATION OF CANADA.

REPORT BY COMMERCIAL AGENT ROBBINS, OF OTTAWA.

The trade and navigation of the Dominion of Canada as shown in the official reports of the Dominion for the fiscal year ending June 30, 1881, is as follows:

Aggregate trade of Canada with all countries, on the basis of "total imports and exports, for the year 1881.

Total imports	$105,330,840
Total exports	98,290,823
Total aggregate	203,621,663
Excess of imports over exports	7,040,017

Aggregate trade of the Dominion of Canada with all countries, on the basis of goods "entered for consumption," for the year 1881.

Total exports	$98,290,823
Total imports for consumption	91,611,604
Total aggregate	189,902,427
Excess of exports over imports	6,679,219

The aggregate of customs duties collected by the Dominion of Canada from all countries for the year 1881 was $18,500,785.97.

The percentage of expenses in the collection of duties by the Dominion of Canada for the year 1881 was 3.87 per cent.

EXPORTS, IMPORTS, AND DUTIES BY COUNTRIES.

The following statement shows the countries trading with the Dominion of Canada, the amount of exports, the amount of imports for consumption, and the amount of duties collected from each country for the fiscal year ending June 30, 1881:

Countries.	Exports.	Imports.	Duties.
Great Britain	$53,751,570	$43,583,808	$8,772,949 97
United States	36,866,225	36,704,112	5,657,292 75
France	662,711	1,631,332	597,948 79
Germany	84,932	934,266	215,108 04
Spain	46,653	399,684	167,412 55
Portugal	106,594	56,893	28,307 99
Italy	145,997	88,726	40,956 25
Holland	215,754	225,190	872,335 63
Belgium	258,433	412,834	90,250 84
Newfoundland	1,523,469	652,304	3,251 22
British West Indies	1,787,813	1,888,695	718,567 09
Spanish West Indies	1,167,612	1,899,813	863,547 69
French West Indies	111,175	18,185	2,137 73
Other West India Islands	80,769	8,454	369 49
South America	732,111	637,620	280,009 74
China and Japan	19,761	1,410,973	348,466 71
Australia	146,363	143	.....
South Africa	81,644	138,815	.....
Switzerland	.....	141,789	33,740 02
Other countries	499,237	777,968	811,133 47
	98,290,823	91,611,604	18,500,785 97

TRADE WITH THE UNITED STATES.

Imports.—The value of exports from the Dominion of Canada to the United States for the fiscal years of 1881 and 1880 is shown below.

Exports, 1881	$36,866,225
Exports, 1880	33,349,909
Increase in 1881	3,516,316

IMPORTS FROM THE UNITED STATES.

Exports.—The value of goods entered for consumption from the United States into the Dominion of Canada for the fiscal years of 1881 and 1880 is as follows:

Imports, 1881	$36,704,112
Imports, 1880	29,346,948
Increase in 1881	7,357,164

The value of goods entered for export not given.

The following statement shows the value of exports from each province of the Dominion of Canada to the United States for the fiscal year ending June 30, 1881, "including coin and bullion," and "estimated amount short returned at inland ports and exported to the United States:"

Ontario	$20,511,374
Quebec	5,376,555
Nova Scotia	2,400,509
New Brunswick	2,334,138
Manitoba	123,871
British Columbia	1,573,249
Prince Edward Island	556,971
Northwestern Territories	2,431
Estimated amount of shortage	3,023,322
Coin and bullion	963,805
Total exports	36,866,225

Statement showing the value of imports from the United States into each province of Canada "entered for consumption" during the fiscal years of 1880 *and* 1881.

Provinces.	1880.	1881.
Ontario	14, 172, 669	17, 466, 184
Quebec	9, 140, 980	11, 362, 195
Nova Scotia	1, 958, 526	2, 216, 649
New Brunswick	1, 712, 952	2, 250, 660
Manitoba	848, 258	1, 485, 699
British Columbia	1, 194, 582	1, 614, 439
Prince Edward Island	201, 341	224, 527
Northwestern Territories	117, 670	183, 799
Totals	29, 346, 948	36, 704, 112
		29, 346, 948
Increase in 1881 over 1880		7, 357, 164

Statement showing the character and value of leading goods imported into the Dominion of Canada from the United States during the fiscal year ending June 30, 1881.

Books, printed matter, and music	$511, 490
Brass and manufactures of	169, 025
Breadstuffs	2, 504, 214
Brick and tile	56, 617
Brooms and brushes	32, 733
Buttons	118, 714
Carriages and parts, including railway cars	143, 651
Clocks	70, 655
Coal and coke	3, 838, 409
Collars, cuffs, and shirt-fronts	53, 840
Combs	27, 405
Copper and manufactures of	57, 797
Cordage	103, 793
Cotton and manufactures of	2, 169, 024
Drugs and chemicals	412, 527
Fancy goods	91, 729
Flax and manufactures of	87, 255
Glass and manufactures of	395, 982
Gold and silver and manufactures of	155, 811
Gutta percha and rubber goods	291, 994
Hats, caps, and bonnets	584, 535
Iron and manufactures of	3, 524, 819
Jewelry	164, 154
Lead and manufactures of	24, 175
Leather and manufactures of	611, 231
Marble and manufactures of	73, 687
Musical instruments	275, 746
Oils (mineral)	280, 617
Oil cloth	73, 244
Paints and colors	100, 684
Paper and manufactures of	478, 012
Provisions	1, 534, 467
Silk and manufactures of	98, 092
Soaps	27, 667
Stone and manufactures of	95, 511
Sugars, sirups, molasses, and candies	623, 205
Tin and manufactures of	211, 950
Tobacco and manufactures of	138, 747
Turpentine, spirits of	102, 675
Vegetables (canned)	255, 249
Watches and parts of	104, 486
Whips	42, 971
Wood and manufactures of	618, 825
Wool and manufactures of	260, 487
Miscellaneous	15, 110, 265
Total	36, 704, 112

EXPORTS TO THE UNITED STATES.

Statement showing the character and value of all exports from the Dominion of Canada into the United States during the fiscal year 1881.

Exports.	Produce of Canada.	Not the produce of Canada.	Totals.
Animals and their produce	$5, 546, 944	$56, 060	$5, 603, 004
Agricultural products	10, 631, 374	62, 828	10, 694, 202
Fisheries, products of	2, 241, 585	14, 907	2, 256, 492
Mine, products of	2, 346, 529	130, 409	2, 476, 938
Forest, products of	8, 349, 944	69, 906	9, 009, 570
Manufactures, products of	1, 310, 557	822, 699	2, 133, 256
Miscellaneous	588, 276	117, 180	705, 456
	31, 015, 109	1, 863, 989	32, 879, 098
Coin and bullion			963, 805
Estimated amount short returned to inland ports and exported to the United States			3, 023, 322
Total exports			36, 866, 225

NAVIGATION OF CANADA WITH ALL COUNTRIES.

The following statement (by provinces) shows the number and tonnage of sea-going vessels reported inward and outward at the several ports of the Dominion of Canada with all countries during the fiscal year ending June 30, 1881:

	Entered inward.		Cleared outward.	
	No.	Tons' register.	No.	Tons' register.
Quebec	1, 297	1, 325, 2-6	1, 515	1, 447, 211
Nova Scotia	5, 157	1, 366, 539	4, 751	1, 278, 072
New Brunswick	3, 161	875, 713	3, 131	885, 685
Prince Edward Island	324	70, 803	415	81, 203
British Columbia	503	374, 515	508	579, 220
	10, 442	4, 032, 946	10, 320	4, 071, 391

NATIONALITIES.

British	1, 842	1, 752, 883	1, 865	1, 773, 117
Canadian	5, 545	914, 352	5, 558	951, 260
Foreign	3, 055	1, 365, 706	2, 897	1, 347, 014
	10, 442	4, 032, 946	10, 320	4, 071, 391

NAVIGATION OF THE UNITED STATES WITH CANADA.

The statement (by provinces) showing the arrivals and departures of sea-going vessels under the United States flag, with their tonnage and

crews, to and from the ports of Canada during the fiscal year ending June 30, 1881, is as follows:

	Arrivals.			Departures.		
	No.	Tons.	Crew.	No.	Tons.	Crew.
Quebec	12	9,022	176	11	8,320	150
Nova Scotia	700	217,726	8,308	594	214,141	7,659
New Brunswick	1,065	350,407	10,218	1,058	356,814	10,425
Prince Edward Island	75	29,091	1,209	74	30,813	1,235
British Columbia	340	287,972	8,800	341	288,896	8,829
	2,192	894,228	28,711	2,078	898,978	28,298

INLAND NAVIGATION BETWEEN CANADA AND THE UNITED STATES.

The following statement (by provinces) of the number, tonnage, and crew of Canadian and United States vessels entered inward and outward at the ports of the undermentioned provinces, showing the intercourse (exclusive of ferriage) by inland navigation between the Dominion of Canada and the United States during the fiscal year ending June 30, 1881, is as follows:

INWARD.

Provinces.	Vessels.	Number.	Tons freight.	Crew.
Ontario	Canadian, steam	4,316	161,456	59,526
	Canadian, sail	5,288	698,872	23,856
	United States, steam	2,646	68,464	23,214
	United States, sail	2,361	202,837	8,200
		14,611	1,126,629	114,796
Quebec	Canadian, steam	346	59,787	4,336
	Canadian, sail	781	46,126	3,128
	United States, steam	115	16	727
	United States, sail	951	109,410	1,907
		2,193	215,339	10,098

OUTWARD.

Ontario	Canadian, steam	3,078	96,780	58,818
	Canadian, sail	5,381	385,875	25,103
	United States, steam	2,625	14,882	23,399
	United States, sail	2,343	95,367	8,261
		14,327	592,854	110,581
Quebec	Canadian, steam	196	20,280	2,424
	Canadian, sail	306	3,393	1,075
	United States, steam	115	----------	775
	United States, sail	1,041	13,758	2,301
		1,658	37,430	6,575

RECAPITULATION.

	Number.	Tons freight.	Crew.
Arrived in Canada	16,804	1,341,968	124,894
Departed from Canada	15,985	630,284	117,156

R. B. ROBBINS,
Commercial Agent.

UNITED STATES COMMERCIAL AGENCY,
Ottawa, June 30, 1882.

THE DECLINE OF AGRICULTURE IN GREAT BRITAIN.

REPORT BY CONSUL TANNER, OF LIEGE.

The agricultural industry of England touched the highest point of all its greatness in the interval of a dozen years prior to 1875, and was more or less prosperous in that time. Since that time it has been on a continual and rapid decline, and to the present continues so.

So beset is the farmer in England with difficulties of an insurmountable character as to reasonably lead one who is *au courant* with them to the conclusion that English agriculture is doomed, that I will as briefly as possible record some of the facts in the case on which I base this conclusion. In the interval above referred to the agricultural classes of England enjoyed great and uninterrupted prosperity. Prices of all their produce except wheat increased, the style of living of farmers improved, everything was life and thrift, and the content was universal, not a murmur of dissatisfaction existing. I doubt if anywhere on the globe one could find a more contented community than the English farmer during this time. Many who had previously labored with their own hands became supervisors of labor. The competition for farms was active, and between the years 1865–'76 the rent of land in England and Scotland increased £9,000,000, or nearly 20 per cent. on the previous amount, representing a capital of £250,000,000.

This is a brief picture of that time; let us look at the other.

The result of the decline of any one industry cannot be attended with those serious results now, in the day of quick steam communication, that they were in ancient times of slow sailing vessels; therefore the result of the decline of this industry cannot be felt by England to the extent it was by ancient Rome, though it is felt, and seriously felt, as a loss of such productions is a loss that seriously affects not only an entire community, but an agricultural loss is one that must be made up by a community in some other quarter.

Agriculture is not perishing in England without a struggle; far from it. In Ireland we see a state of affairs that is too well known to the world for my pen to dwell upon. England proper is not free from agitation, and in Scotland a state of affairs exists little short of being as deplorable as those we see in Ireland.

As this state of affairs is pertinent to my subject, and as the agitation in Scotland arising from agricultural causes is not understood by the outside world—as little attention is comparatively given to them—I will, as briefly as possible, endeavor to give such details of the commencement of an agitation which is one that may lead to results that I will not predict, preferring to content myself with describing it as it is, and allow others to draw their own inferences, or time to make developments.

The strong hand of the government has been found necessary already in Scotland, where several agitators have been arrested and cast into prison. This action has inspired two others with extra vigor, who make capital out of the affair, and the agitation goes on with renewed vigor. In attempting to give an account of the agitation in Scotland it will be necessary to glance at some of the social changes through which this country has passed during the present century.

Out of Scotland it is perhaps not generally known that not very long ago, most of the Highland countries were the scenes of evictions on a wholesale scale, compared to which the forced emigration of the Irish peasantry sinks into insignificance. Entire communities, from the patriarch of the third generation down to the new-born babe, were banished *en bloc* to Canada—the Siberia of England—and thrown there on their own resources, to establish new homes, or starve, as the case might be. Where murmuring or reluctance were manifested to accept their fate, their houses were burnt down over their heads, and they themselves were turned adrift homeless on the bleak hill-sides to seek subsistence as best they could. The depopulation of the Highlands began in 1771. The landlords at that time opposed strenuously all efforts of the people to emigrate, their object being to overspread, their estates with "retainers" whose numbers in each case enhanced the dignity of their "chief," and indeed their profit; for commissions in the army were granted to the chiefs who could bring so many recruits from their estates to the *King's* armies. Hence for the moment it was found more profitable to check depopulation. The wars with America and France, the campaigns in India, called for a display of patriotism, for sacrifices of life and duty from the British subject, and these hardy people responded first to the demand. Corps after corps were sent to the north to fill up the depleted ranks of the English armies, until it was computed that, by 1810, 50,000 sturdy Highlanders had re-enforced the British army. But as soon as these wars were over these Highlanders, or such numbers of them as were left, were disbanded and turned adrift. The stories which each of these war-worn veterans carried back with him to the glen—how he had served his country in the hour of need, "the battles, sieges, fortunes, he had passed," now, when it was over, turned adrift, penniless and destitute—rendered the service so justly unpopular among the Scotch that, since Waterloo, a country which once supplied recruits to half the British army has barely filled the ranks of half a dozen regiments. In 1811, evictions broke out again with renewed vigor, and we then had what is known as the "Sutherland clearances." It was advanced and accepted that depopulation was the royal road to prosperity, and acting upon this theory a reign of persecution and heartless cruelty was inaugurated that has but few parallels in any history. Evictions throughout the Highlands became the order of the day, until, in 1855, the once populous glens had been converted into silent solitudes. In short, the people had been replaced by sheep.

Sentiment, or the love of country, has its place with all people, and with none more than with the Scot. From the smoke, din, and dangers of a hundred battle fields he had returned to his native heath to find such a state of affairs as I will allow him to give his own account of; and it will be necessary, for a comprehensive knowledge of the state of affairs in Scotland and of the present agitation, to present some of the quotations from a pamphlet which the present agitators have published, and are circulating throughout Scotland. I give the following as a preface to a detailed account of what I have just referred to, the Sutherlandshire evictions:

What was true generally of the Highlands was in the county of Sutherland carried to the greatest extreme. That unfortunate county, according to an eye-witness, was made another Moscow. The inhabitants were literally burnt out, and every contrivance of ingenuity and unrelenting cruelty was eagerly adopted for extirpating the race. Many lives were sacrificed by famine and other hardships and privations. Hundreds, stripped of their all, emigrated to the Canadas and other parts of America. Great numbers, especially of the young and athletic, sought employment in the Lowlands and in England, where, few of them being skilled workmen, they were obliged,

even farmers who had lived in comparative affluence in their own country, to compete with the common laborers in communities where their language and simple manners rendered them objects of derision and ridicule.

The aged and infirm, the widows and orphans, with those of their families who could not bear to leave them alone in their helplessness, and a number whose attachment to the soil which contained the ashes of their ancestors was proof against all inducements to go, accepted the wretched allotments offered them on the wild moors and barren rocks. Their ignorance of the English language and the want of natural leaders made it impossible for them to make their grievances known to the outside world. They were, therefore, maltreated with impunity. The ministers generally sided with the oppressing lairds, who had the church patronage at their disposal for themselves and for their sons.

The following account is given, stated to be by an eye-witness, of the evictions from a single Sutherlandshire strath, in which nearly 2,000 people found a home, the entire parish being converted into a wilderness:

The consternation and confusion were extreme. Little or no time was given for the removal of persons or property, the people striving to remove the sick and the helpless before the fire should reach them, next struggling to save the most valuable of their effects. The cries of the women and children, the roaring of the affrighted cattle, hunted at the same time by the yelling dogs of the shepherds, amid the smoke and fire, altogether presented a scene that entirely baffles description. It required to be seen to be believed. A dense cloud of smoke enveloped the whole country by day and even extended far out to sea.

At night an awfully grand but terrific scene presented itself—all the houses in an extensive district in flames at once. I myself ascended a height about eleven o'clock in the evening, and counted two hundred and fifty blazing houses, many of the owners of which were my relations, and all of whom I personally knew, but whose present condition, whether in or out of the flames, I could not tell. The conflagration lasted six days till the whole of the dwellings were reduced to ashes or smoking ruins.

I give these as specimens of the literature that is now being used to draw the Scotch farmers into the agitation.

Most of this account being taken largely from English sources, absolves me from any charge of being sensational or partial.

The ruins of what were once extensive, prosperous, and happy townships may still be seen in Lochater along the shores of Loch Arkeg. The hardy, bare-legged peasantry that once inhabited them, are no more, and the celebrated Glencoe, that formerly teemed with a happy population, is now a silent wilderness. Famous Glengarry is now a sheep-ranch, and the once powerful clan Macdonnell are no one knows where. Around Fort Augustus, and far into the country of the clan Fraser, nothing meets the eye but desolation, nothing heard save the bleating of sheep.

From 1855 to the present time, evictions on such an extensive scale have ceased, but still go on on a more moderate one, a method almost the same in its results having been substituted, but it has the advantage to the landlord, that it accomplishes the purpose in a much more quiet manner, so that no one can cry out against him. Grazing and other privileges are curtailed. The increase of population is too great for him, and he curtails privileges and ignores a reduction of prices, and the farmer is forced, as it would seem, from his own free will, to throw up the sponge in despair, and do as his ancestors have done before him, wander forth to seek his subsistence somewhere else.

The reasons for this state of affairs may be found in these simple facts. The section that I have just described was found to be more remunerative to the landlord as sheep-ranches than as farms. Those who had rented them eked out a miserable existence at all times, patiently contenting themselves with such subsistence as a Fijian would refuse with disdain, the bulk of the pittance gained going to the landlord for rents. When it was found that the road to wealth was

sheep-farms, from that moment the fate of the Scotch peasant was sealed. Sheep took his place, and he was driven forth a hungry wanderer.

But now a new trouble arises. For those who remained from the depopulation to take care of the sheep, from others who gradually found their way back from the hillsides, and from the increase of population, it is necessary, says the landlord, to force emigration. Owing to competition with Australia and South America, wool which has afforded the landlord the greater remuneration fell in price to half its original value, and in consequence sheep-farming is now anything but profitable. In this condition of affairs the landlord finds that by further depopulating his estates he can find it more profitable to substitute deer, which the accumulation of wealth in England has caused an increased demand for, and which affords him sport for the chase; therefore the sheep farmer must be in his *turn ousted.*

"The Celts were replaced by the sheep, and now the sheep and Celts are both replaced by the deer." The Highlander now finds himself threatened with this new evil, which is hardly less in degree than the one his fathers suffered before him. The landlord wishes to get rid of about 75 per cent. of those who are incumbering his estate, and make room for that sport which is so essential to the make-up of the English gentleman. This is to-day the state of affairs, and these are the bottom facts in the present agitation in Scotland.

The bearing that these matters have upon the decline of agriculture is apparent without comment, and I must hasten on to other features that will go conclusively to make out my case. I will repeat here that most of these facts and those which are to follow are gleaned directly from English accounts and sources.

Mr. Giffin, in a letter written by him to the board of trade, London, says:

> The imports of agricultural products into England amounted in 1867–'69 to £79,000,000; in 1877–'79, exactly ten years later, to £129,000,000, an increase of £50,000,000 in ten years. In 1878–'80, the average annual imports were larger than in 1877–'79, viz, £133,000,000, making the increase from 1867–'69, £54,000,000 in an interval of eleven years.

I inclose a table taken from this letter. These figures tell their own dismal tale, and mark unmistakably the rapid decay of English agriculture.

In a speech at Reading, Mr. Shaw-Lefevre said:

> If prices had risen in England in proportion to the deficiency of produce, we should have had something like famine prices throughout six years. The depression of trade would consequently have been enormously aggravated, and there would have been great and general suffering.

The speaker went on to show that the reduced freight, the unprecedented large yield, and other things in America conspired to avert such a calamity. But the fact of such a serious calamity threatening them shows the importance the subject I am treating is to them, and how its loss or decline would be calculated to affect the English people.

The English are sensible of this only to a certain extent. They deplore in dismal strains their "agricultural depression," and try to find out the causes of it, and the reasons that they themselves give show that it is more serious than the name they give it; that it is an irrevocable decline instead of a "depression." The reasons assigned by Mr. Shaw-Lefevre were:

> The seasons were bad; there was too much or not enough rainfall, *and there was a lack of sunshine at all times.*

With an article that nature supplies as bountifully as water, man can more or less make it subservient to his will, but he cannot make the sun shine. Plants and all vegetation must have light; they are all sun-worshipers, and without its light they cannot exist; and without looking for other causes, this one is enough to mark irrevocably the decline of English agriculture.

But there are other contributing causes to this end: high local taxation, high rents, and an almost superstitious reverence for forest. If an ax is applied to a tree it is a subject not unworthy of a leader in the principal journal. The Briton must have his hunts and his sports, and a farmer who pays a high rent for his land, it matters little how much he may be annoyed by the ravages of hares and other game, must content himself with putting up scare-crows or pelting the intruders with stones, but dares not molest them otherwise, or the landlord that gives them chase, to the demolition of his products. Many more causes and reasons might be given to show that the agricultural industry of England is doomed, that it will continue to decline until there is nothing left of it. In one year the falling off in English agriculture, as will be seen, was 42 per cent.; for six consecutive years it was 20 per cent.; and this goes on; and from what quarter can a hope come that it will ever improve; that the sun will shine more in 1882-'83 than it did from 1867 to that time; that labor will be less expensive; that the farmer will ever be able even to pay his arrears of rent that a declining industry has imposed upon him? It would require a consecutive favorable season of ten years, with prices and everything in his favor, for the farmer of England to do this. American competition must be done away with, the landlord must reduce his rents; in fine, everything must work in his favor to enable him to recover the two hundred millions sterling which it is conceded he is behind.

The difficulties that environ the English farmer are too numerous and of too serious a character for him ever to steer through them or ever to enable him to compete with the United States. The accumulation of wealth in England, bringing with it certain luxuries, will convince the landlord that his interest lies in another branch of industry, which will take the place of farming; at any rate, agriculture will perish in England. The time has passed to apply remedies, if remedies could save it, and the requisite remedies cannot be applied without making other patients more troublesome to the state; so this industry must languish and die.

GEO. C. TANNER,
Consul.

UNITED STATES CONSULATE,
Liege, May 3, 1882.

Statement showing the value of imports of the undermentioned articles into the United Kingdom from 1867 to 1880, inclusive, as given in the agricultural returns.

	1867.	1869.	1871.	1873.
Imports in Group I: Live stock, &c	£4,148,409	£5,299,193	£5,662,150	£5,418,584
Imports in Group II: Meat, fish, &c	13,386,320	16,549,205	18,564,425	24,384,319
Imports in Group III: Wheat and wheat flour	28,504,673	23,308,497	26,816,891	34,388,598
Imports in Group IV: Barley and other grain, deducting spice and sugar	15,420,618	17,569,867	18,784,361	21,176,246
Vegetables, chiefly potatoes: part of Group IV	676,330	737,851	635,563	2,536,503
	62,136,350	63,464,813	70,364,390	87,894,250
Add imports of wool (sheep and lambs), less exports	8,572,025	6,637,119	9,013,304	9,473,130
Manure imports	2,497,399	3,210,332	2,860,204	2,858,638
Imports of feeding stuffs	5,648,643	6,767,992	7,656,330	7,729,942
Total	78,854,417	80,080,256	89,894,228	107,955,960

	1875.	1877.	1879.	1880.
Imports in Group I: Live stock, &c	£7,326,288	£6,012,564	£7,075,386	£10,239,295
Imports in Group II: Meat, fish, &c	28,039,220	31,227,346	33,645,153	39,838,081
Imports in Group III: Wheat and wheat flour	32,380,726	40,694,419	39,970,120	39,327,829
Imports in Group IV: Barley and other grain, deducting spice and sugar	24,495,950	27,009,829	25,577,622	28,250,013
Vegetables, chiefly potatoes; part of Group IV	1,524,416	3,000,998	3,455,361	3,751,181
	93,766,600	108,035,156	109,743,642	121,406,300
Add imports of wool (sheep and lambs), less exports	19,853,547	11,670,119	8,180,416	10,616,964
Manure imports	2,423,305	2,993,352	1,711,677	1,783,642
Imports of feeding stuffs	9,435,696	9,149,419	7,931,273	8,628,772
Total	115,479,148	131,848,046	127,567,008	142,435,678

NEW IRON MINES IN SWEDEN.

REPORT BY CONSUL ELFWING, OF STOCKHOLM.

The immense and constantly-increasing import of iron ore to England from 1868, when it amounted to 114,435 tons, to 1880, when it had increased to 2,634,401 tons, entitles one to suppose that a railroad, which has been projected here in Sweden, and by which inexhaustible supplies of iron ore, situated in the north of Sweden, may be made profitable, will be favorably looked upon in the United States; all the more so as America, during late years, has become a competitor in the European iron ores on a scale which makes it probable that the store in the mines now worked will soon not correspond to the demand. I may therefore be permitted to give the following information regarding this project:

In the belt which extends from Gellivara in a northwesterly direction towards the Norwegian frontier, and which comprehends the upper part of Gellivara and the greater part of the parish of Jukkasjoror, exist known supplies of iron ore of such a compass that one is entitled to suppose that said region in this respect is not surpassed by any district in Sweden; but the same region contains, also, a great many other supplies of ore, the existence of which certainly has been known from the beginning of this century, but, nevertheless, have not been examined.

The above is quoted from an application of the provisional government of January 10, 1874, in consequence of which the government ordered an accurate and complete examination of the extent and quality of these iron ores.

The official account of this examination, published in 1877, gives a complete statement of the immense supplies of iron ore existing in Luosavara, Kirunavara, Soappavara, and Gellivara, besides several less important mines.

But as an export of iron ore to England and America can properly only be done on a great scale from the two first-named ones, Luosavara and Kirunavara, I confine myself to impart some extracts concerning them from the official report just mentioned.

The fields of ore are situated just south of the sixty-eighth parallel and 21° east of Greenwich. The climate, although, of course, severe, is, considering its northern situation, the mildest in the world, as may be seen by the isotherms on any map where the same are shown. From these may be seen that during the coldest month, January, the average temperature is the same as the northern part of the Black Sea, Nova Scotia, and the northern regions of Lakes Huron and Michigan. North and east of the ore-fields are two large villages, where barley and potatoes are profitably cultivated, and in the part of Lapland which belongs to the Lan of Norrbotten, and in which the climate is about the same, resided, according to official accounts, in the year 1875, 5,600 Swedes, 2,518 Finlanders, and 4,331 Laplanders. The last live almost exclusively on their reindeer, but the Swedes and Finlanders, to the number of 8,118, have fixed dwellings and live by agriculture, cattle-raising, fishing, hunting, and the management of the forest.

At Gellivara, which, although situated 37′ more to the south, has a somewhat harder climate, have mines been worked towards the end of the last and the beginning of the present century, but the working had to cease in consequence of the lack of roads.

The vein of ore at Luosavara has, according to the before-mentioned report, a length of 1,480 yards, with 45½ yards at the greatest width, and covers a surface of about 10 acres. The supply of ore is estimated at 27,000,000 tons down to the surface of the Lake Luosajarvi, and at 240,000 tons for each yard below the lake. Analysis of seven general samples exhibited 68.1 per cent. iron as the lowest contents and 73.1 per cent. as the highest. Phosphorus, which varied from 0.003 (lowest) to 0.032 (highest), is, on an average, for the seven tests, 0.029 per cent.

At Kirunavara, situated 3 English miles south of Luosavara, the vein of ore has an unbroken length of 4,650 yards, varying in width from 61 to 282 yards, and covers a surface of about 63 acres. The supply of iron has been estimated at 255,000,000 tons over the surface of the Luosajarvi, and at 1,450,000 tons for each yard below. The ore contains, however, much phosphorus, except in three regions, where the phosphorus varies between 0.03 and 0.047 per cent. In this ore the iron varies between 71.4 per cent. and 73 per cent. The supply of iron ore applicable to Bessemer steel existing in these regions is estimated at 56,000,000 tons above the surface of the Lake Luosajarvi, above which there exist, therefore, not less than 83,65[illegible],000 tons ore with 68 per cent. to 73 per cent. iron applicable to Bessemer steel. There are, besides, above the same surface, furthermore, 203,864,000 tons to which the method of Thomas & Gillchrist may be applied.

The railroad by which these iron ores should be accessible will commence at the always open fiord of Opoten, in Norway, touch at Luosavara, Kirunavara, and Gellivara, and then go to the nearest harbor by the Bothnian Gulf, from whence it follows the coast to Haparanda and Tornea, to there join the Finnish-Russian railroads. The whole length of the road is 230 English miles, of which 25 are within Norway, where the ground is rocky, and consequently the cost of building highest.

In Sweden the ground is favorable. On an average the cost of building may be estimated at £6,000 per mile. It is expected that 1,000,000 tons of ore, at least, can be exported every year from Luosavara and Kirunavara, by which alone an income of £200,000 can be obtained, out of which surely one-half will be net profit. There will, further, be ore from Gellivara to the Bothnian Gulf; lumber, barrel-staves, deal, and tar; produce of the farms, butter, meat, hides; fish from Norway, and colonial goods.

The greater part of Finland will, during the seven months the sea is closed by ice, in this way obtain communication with Europe and America. Petersburg will by this road, during the winter months, have 230 miles shorter road to an ice-free harbor than via Hamburg.

NERE A. ELFWING,
Consul.

UNITED STATES CONSULATE,
Stockholm, May 22, 1882.

THE FISHERIES OF NORWAY.

REPORT BY CONSUL GADE, OF BERGEN.

In order to be able to give a more detailed account of the proceeds of this season's cod fisheries in Lofoden and the other principal fishing districts in the north, I have postponed to send my report for the past quarter until the final official lists and statements were out. These are now published, showing up to the 4th April the following results of cod-fish caught:

Districts.	Number.
Lofoken, at all stations	27,500,000
Nordland 'Bodo and southern districts	2,500,000
Nordmore, 3,500,000; Sondmore, 2,500,000	6,000,000
Total	36,000,000

Or nearly the same quantity as in 1881, the whole catch being then 37,000,000.

The cod fisheries in Finmarken from Hanmersen round the North Cape in Verangerfiord, and to the Russian frontier, which follow those in Lofoden, are already commenced at the beginning of this month; but, owing to constantly stormy weather, the result up to this date has been very poor, and the prospects are reported to be very discouraging. Last year the return for Finmarken was 11,500,000 of fish.

The cod along the whole coast being this season uncommonly small and meager, and containing small livers, the 31,000 barrels collected thereof will only give a production not exceeding 10,000 barrels of oil of the different inferior qualities, besides 2,100 barrels of best steam-refined oil, making one-third of the average quantity produced during the last five years.

In 1881 the quantity of livers collected was 55,000 barrels, and in 1880 63,000 barrels, and the figures for steam-refined oil for these two years, 2,500 barrels, 3,060 barrels, respectively.

According to the official report, the Lofoden fisheries this season have given employment to 27,500 men, in 6,500 boats, for which the average gross proceed is estimated: For a net-fisherman at 100 kroner; for a

long-liner, at 320 kroner; for a deep-liner, at 200 kroner (1 kroner 26.8 cents); but it follows of itself that in several cases a better result has been obtained.

For the raw fish the prices at the beginning of the catch and up to the middle of March were unusually high, even up to 26 to 28 kroner per hundred; but since then they were gradually declining, and 21 to 22 kroner per hundred may be quoted as the average price this season, against 15 to 16 kroner last year. For oils the difference in the prices this year are, however, more considerable, these being already quoted at 150 kroner per barrel for steam-refined quality, the very highest figures last year being 110 kroner, but large lots were shipped even as low as at 80 kroner.

The fishing population living along the rocky and hardy coasts in the northern parts of this country are earning their hazardous livelihood, exposing themselves to daily privations and perils, and every winter many poor families up there are deprived of their supporters during the fishing time. This last winter fearful storms set in upon these coasts already in the beginning of the new year; they continued incessantly during all January and February, and occasioned so many damages and losses on land and sea that hundreds of families lost all they had and were totally ruined. The poor districts themselves being incapable of repairing these heavy losses by their own means, the government was compelled to send to their aid a sum of 150,000 kroner, and since more than 500,000 kroner have been collected for the same purpose all over the country by voluntary contributions, principally for providing the poor fishermen with boats and nets, of which many had been lost or swept away by the waves.

The sanguine expectations of a good herring fishery this winter in these southern districts, say, from Hangesund to Stavanger, were unfortunately frustrated by incessantly heavy storms, preventing the boats from coming out; and, consequently, only 30,000 barrels were carried for exportation. The quality of this catch was good, and it is considered to be the genuine "vaarsild" (spring herring), which, fifteen to twenty years back, regularly every winter came to these coasts, and were caught in very large lots.

F. G. GADE,
Consul.

UNITED STATES CONSULATE,
Bergen, April 25, 1882.

THE TEA MARKET OF FOOCHOW.

REPORT BY CONSUL WINGATE.

The market was opened by a Russian buyer on the 27th of May, very much earlier than had been generally expected.

The first musters of Pakling were shown on the 17th of May, and country teas commenced to arrive on the 23d.

The amount of treasure sent into the country was considerably less than the preceding year, and prices paid by native buyers were generally on a lower scale; but the first crop of tea was of a very inferior quality.

The first direct shipment of tea for London was on the 8th of June. The last clearance for London was on the 11th of March, 1882.

The first invoice for the United States was certified at this consulate on the 2d of June, and the last on the 7th of February, 1882.

Total export from the port, as per customs returns, 97,817,105 pounds. Total last year, 110,728,453 pounds. Deficit of 1881 as compared with 1880, 12,911,348 pounds.

A decrease is noted in the amount sent to every country excepting Australia and New Zealand and South Africa. The amount now taken by Australia and New Zealand is 22,175,436 pounds. Last year it was 20,989,479 pounds.

The Russian brick-tea trade, via Tientsin, is now said to be in a very unsatisfactory state. The past season only 5,577,468 pounds of brick tea were sent to Tientsin, as against 8,145,860 pounds in 1880, and 13,315,945 pounds in 1879. The Russians at this port lost largely during the year 1881 by the burning of a brick-tea factory in the country. They were also robbed of a considerable amount of treasure at the time of the fire, which, as yet, they have been unable to recover. They have, however, since the fire, enlarged their factories at Foochow.

TEA TO THE UNITED STATES.

The whole amount of tea sent from this port to the United States, as per invoices certified at this consulate during the season of 1881, was 3,493,656 pounds; during the season of 1880, was 4,254,605 pounds; during the season of 1879, was 2,089,690 pounds. Of the tea sent the past season, 1,901,465 pounds were Oolong and Pouchong; 988,112 pounds were Congou and Souchong; 604,079 pounds were mixed sorts, and undescribed; 594,079 pounds went to San Francisco; 2,899,577 pounds went to New York.

Of the tea sent to New York, 346,613 pounds were sent via Amoy; 13,384 pounds were sent via Shanghai; 155,799 pounds were sent via London; 2,383,781 pounds were sent direct.

The 2,383,781 pounds shipped direct to New York were carried in six British steamers, which took part of their cargoes at other ports; 457,850 pounds of the tea sent to New York, and 26,991 pounds of that sent to San Francisco, were declared to be in transit for Canada.

The invoiced value of all the tea sent to the United States was $859,812.99. For the season of 1880 it was $1,043,055.84.

There is nothing of special interest to note regarding the tea season of 1881, but the American market has been far from satisfactory to shippers.

J. C. A. WINGATE,
Consul.

UNITED STATES CONSULATE,
Foochow, April 21, 1882.

ITALIAN BREEDING CATTLE.

REPORT BY CONSUL CROSBY, OF FLORENCE.

I have the honor to submit the following report regarding a very fine breed of Italian cattle, with the hope that it may prove useful in inducing some of our cattle breeders to introduce them into the United States.

For many centuries the Val di Chiana (Tuscany) has been celebrated for its white cattle, large in size, docile and easily managed, capable of

enduring great amount of work, and making excellent beef, they being very easily fattened. I have visited many of the estates and poderi for the purpose of examining these cattle, and certainly agree with the proprietors and farmers in their opinion that for working purposes and beef they are far superior to the Durham and Shorthorn breeds so popular in England and America. For milk and butter I do not recommend them. Bulls begin to serve heifers and cows from the age of two years up to four or five years, when they are slaughtered. Heifers are taken to the bull when twenty months old, and are usually bred to until eight to ten years old. Oxen, and heifers as well, are put in yoke when twenty months old, and are fit for work at the age of two years, and, unless injured, stand five years more of hard work, when they are usually stall-fed and slaughtered. About the same food and fodder are used for fattening as in the United States.

The following tabular form will show interesting details as to age, weight, and price:

Kind.	Age.	Height.	Weight.		Price.	
			From—	To—	From—	To—
			Pounds.	*Pounds.*		
Calf*	Birth		45	75		
	Six months	4 feet	330	450		
	One year	5 feet	880	1,100	$120 00	$140 00
Heifer	One year	5 feet 2 inches	880	1,000	80 00	100 00
Bull†	Two years	5 feet 7 inches	1,550	1,750	200 00	
	Three years	6 feet 3 inches	1,550	2,200	250 00	300 00
Ox	Three years	6 feet 3 inches	1,850	2,200	140 00	160 00
Cow‡	Three years	5 feet 2 inches	750	1,500	140 00	180 00

* Calves selected for working purposes are castrated at two months of age.

† Bulls four years old are kept apart for one month to fatten, and may increase 140 pounds weight and be sold at from $16 to $18 per cwt.

‡ Cows eight or ten years old no longer used for breeding are kept three months for fattening, and are susceptible of 250 pounds increase in weight. Price, from $8 to $14 per cwt.

These cattle have very long and straight backs and well-rounded bodies; neck very thick, with abundant mantle; head light and clear cut, with short and thin horns; ears long and flesh-colored inside; legs rather large and strong, and placed well under; hoofs well proportioned, and not too straight; tail quite short, and black at the end. This black and silver color extends over the muzzle, along the back to the rump, when it ceases and appears again at the end of the tail. The color of the hair is a silver white, very thin, and abundant.

The principal markets for these white cattle are Arezzo, Castiglione, Fiorentino, and Tojano della Chiana in the province of Tuscany. Annual fairs are held, beginning after harvest time, about the middle of August, and generally increasing in importance until December.

I have made inquiries as to the cost of transportation by steamer from the nearest port, Leghorn, to New York, and in reply the agent of the Anchor Line informs me that $50 per head is charged, the shipper providing all fittings, stalls, boxes, fodder, and attendants, the ship only providing water. This line of steamers is very good, and the cattle can be well accommodated on the upper deck. The length of voyage is about twenty-six days.

J. SCHUYLER CROSBY,
Consul.

UNITED STATES CONSULATE,
Florence, May 20, 1882.

OFFICIAL INSPECTION OF SWISS GOLD AND SILVER MANUFACTURES.

REPORT BY CONSUL MASON, OF BASLE.

During the ten years preceding 1880 it became gradually apparent that modern watch and jewelry makers in Switzerland, as well as in adjacent countries, had relapsed from the ancient standards of integrity in respect to the purity of the precious metals used in their manufactures. Watch-cases and jewels bearing the maker's stamp of 18 k, were found in many instances to contain only 14 carats or less of pure gold, and in silver watch-cases, plate, and all other articles of taste or luxury made from precious metals, the same demoralization and dishonesty prevailed to an extent which threatened to drive honest manufacturers out of competition.

To remedy this abuse, the Federal Congress of Switzerland, on the 23d of December, 1880, enacted a stringent and comprehensive law, placing the examination and stamping of gold and silver articles, manufactured or sold in this country, under national control.

By the terms of this law it is required that all watch-cases, having a declared fineness of 14 carats (583 thousandths) or more of pure gold, or watch-cases of silver containing 800 thousandths or more of pure metal, shall be submitted to official inspection and receive the federal stamp. All watches of the grades referred to are required, before being offered for sale, to show on their cases the federal stamp, or that of some foreign country which enforces a similar law, based upon the same standards of purity for both gold and silver.

Other gold and silver articles, having respectively a purity of 18 carats of gold, or 875 thousandths for silver, may, upon application of the manufacturer or seller, receive the government mark or stamp, but the examining officer is not required to state in his official mark the exact degree of fineness which his examination has revealed, provided that it exceeds the minimum limits above stated.

All gold and silver wares which have not passed official inspection are forbidden to bear any other mark or sign indicating their standard of purity except one stating the true and actual proportions of precious metal and alloy which they contain, and they must bear, besides, the name or trade-mark of the manufacturer, so that their origin may be readily and infallibly traced. The copying or use of the peculiar devices as marks used to indicate the fineness of articles containing principally gold or silver upon other and baser metals is rigidly forbidden.

If a manufacturer offers for sale watch-cases marked with their real degree of purity other than by an official assayer he is liable to a fine equal to five times the amount of the fees which would legally attach to the same merchandise for official examination and stamping. If this unofficial mark is false and states incorrectly the actual proportion of precious metal in the goods so marked, then the use of such a mark becomes a crime against the state, punishable by fine or imprisonment, or both. The law is elaborate and too lengthy to be quoted in full, but the above are among its most important provisions.

The date fixed for enforcement of the law was the 1st of January, 1882, and it has therefore been three months in operation. In provid-

ing for its enforcement the Federal Council, early in 1881, issued an invitation to all the cantons to nominate candidates for appointment as assayers (or inspectors), and at the same time to announce how many offices of assay (*bureau de contrôle*) each canton desired to establish. Applications were at once received for twelve offices, mostly, as was natural, from the French or watch-making cantons, and thirty-nine persons applied for diplomas and commissions as official assayers. After the rough examination, conducted under the auspices of the federal government, twelve of the thirty-nine applicants were found competent and received commissions. This number not being adequate, the federal government organized a school of instruction under control of Professor Lunge, of the Polytechnic School at Zurich, and Mr. Louis Frutiger, a practical assayist of Geneva, under whose joint teaching a class was so thoroughly instructed that on the 13th of July last eleven of its members passed successful examinations and were commissioned in the corps of official inspectors, who now numbered altogether twenty-three, enough to begin a practical enforcement of the law at the appointed time. A second course of special instruction from October 15, 1881, until the 1st of March, 1882, prepared seven more successful applicants, so that the corps of commissioned assayers now numbers thirty men.

There is no exportation of jewelry or silverware from Switzerland to the United States in sufficient quantities to make the application of this statute to the manufacturer of those articles a matter of interest to American readers. But the American export of gold and silver watches is enormous and steadily increasing. During the past month of April the total exports of this class to the United States from the district of Basle alone, aggregate 1,021,294 francs, an increase of 181,619 francs compared with the returns of April last year. It is therefore of the highest interest to American watch dealers and purchasers to know that since the 1st of January last all gold and silver watches of the grades mentioned, which have been manufactured in or exported from Switzerland, have been, or *should have been*, officially examined and stamped, and that the marks indicating the degree of purity in the metals composing such goods are official and authentic. The watch imports from Switzerland to the United States, if carefully examined in respect to these marks by appraisers of customs and importers, should have henceforth a new and definite standard of integrity.

On the 26th of October, 1881, the Federal Council issued a code of specific instructions prescribing the manner in which the different classes of gold and silver merchandise should be examined and stamped.

The following is a condensed translation of the instructions which apply to watch-cases:

Examiners will stamp watch-cases in the center of the innerside of the movable leaf. Should other marks be already engraved there, the examiner will place his stamp with regard to symmetry.

For watch-cases of fanciful or irregular forms, the manufacturer will designate a proper place where the stamp can be advantageously placed.

When the inner case of a watch is made of a different metal from that of the outer case, both inner and outer case must bear the same number, and both must be presented at the same time for inspection. Such inner case of inferior value must also be inscribed with the full name of the metal or composition of which it is made, as "chrysot," brass, copper, "maillechort," "colored silver," &c. Clear, full letters must be used to avoid deception.

Watch-cases shall be stamped inside of the edge, at the right side of

the pendant (stem) opposite the "onglette." If the manufacturer prefers, the stamp may be placed upon the stem, but only after it has been permanently fixed to the body of the case.

Detached pendants cannot be inspected or stamped.

If the pendant-ring (or stem) be found to be of inferior metal to the remainder of the watch-case, such stem will be broken by the inspector and the entire case rejected until presented with new pendant of corresponding fineness and value.

FRANK H. MASON,
Consul.

UNITED STATES CONSULATE,
Basle, May 3, 1882.

THE "SAMARITER VEREIN."

REPORT BY CONSUL DUBOIS, OF AIX-LA-CHAPELLE.

Much interest is being manifested at present throughout the German Empire concerning the benevolent efforts of the celebrated Professor Esmarch, of Kiel, to establish what is called the Samaritan Society.

The aim of this society is simple, wide reaching, and humane. The professor proposes to establish in all the towns and cities of the empire organizations whose members shall be thoroughly instructed in the art of attending to the immediate wants of all who may meet with sudden accidents, but who cannot at once secure medical aid. Professor Esmarch conceived this idea from having seen the beneficial workings of the ambulance association of England, which composes over forty thousand members, among whom are some of the most distinguished persons of Great Britain and Ireland. Believing that a similar organization would work out inestimable good for his countrymen, the professor at once founded in Kiel a society which he happily styles the "Samariter Verein." Thirty was the limited membership proposed, but the idea at once became so popular that in less than two months over eight hundred members were enrolled, composed of noblemen, peasants, merchants, mechanics, artisans, and many others belonging to the various professions, all being anxious to learn the art of helping their fellow-men when in distress and unable to obtain the immediate care of a physician. Scarcely had the good work begun in Kiel, when some of the leading people of Berlin saw the great benefit that was sure to accrue to society by a general adoption of the organization throughout the empire, and Professor Esmarch was at once called to the capital to establish a central organization there, which is now busily engaged in extending its humane work over the land.

The necessity and object of the society are best given in the words of Professor Esmarch, which are as follows:

As every one knows how often the life of a fellow-man who meets with a sudden accident depends upon the immediate assistance rendered him, all can readily see the great necessity of rendering such aid in a skillful and proper manner. Very few there are, however, among the people who understand how to give the necessary assistance before the doctor arrives. How few are there who have learned how to stop a serious bleeding, how to set and bind a broken leg, or how to restore to consciousness apparently drowned or suffocated persons, and how often have injured persons suffered from the ignorance of those who have rendered them assistance. Surgeons and physicians often have reason to complain that ignorance of the art of treating injured persons is so universal among the laity, especially in cases where a wounded person, exhausted from the loss of blood, the flow of which might have been stopped, or when a patient

with a broken limb, who, by improper preliminary treatment, has been made worse, is brought to the door of the doctor's house or to the hospital. How many die every year who could be saved by prompt treatment, if some one were near who understood how to render the necessary assistance. The knowledge which is taught to members of the Samaritan Society can be applied in all the paths of life, preventing death and relieving human suffering.

Soldiers upon the battle-fields, police upon the streets and public highways, miners in their subterranean workshops, railroad employés in the constantly occuring and oft-times disastrous accidents; the workman in the foundry, in the factory, in the machine shop, in the mill; in fact, everywhere amidst the daily avocations of life the practical knowledge of the Samaritan can be applied to save health, limb, or life of human beings who might, without immediate and skillful assistance, suffer terrible agonies, and perhaps perish.

A soldier slightly wounded can help himself and assist a comrade who may be suffering from a broken limb, a ghastly saber-cut, or whose wounds may be exposed to flying dust, vermin, or other foulness, if he has a knowledge of the plain and simple facts taught to the Samaritan. The Samaritan miner who has escaped the terrible ravages of a gas or powder explosion could at once render assistance to the injured by applying his knowledge of binding wounds, stilling the flow of blood, and resuscitating the suffocated until medical aid could be secured. Persons wounded in mines are often without necessary medical assistance until they are transported to the surface, and often through the loss of blood whose flow might have been stopped, or the agonizing pain of wounds which might, in a measure, have been relieved, they suffer and perish, when they could have been saved had any one been present sufficiently instructed in the art and manner of caring for the pressing requirements of the injured.

The sea is dotted with sailing vessels which are entirely without medical help. In storms, and often in pleasant weather, accidents occur to sailors, who die from their wounds, but who could unquestionably be saved if a Samaritan sailor or captain were present to use the practical and efficient knowledge acquired by a few hours given to the study of wounds and their treatment. Thousands of men perish yearly, at sea, because no one is present capable of properly binding a wound or of skillfully applying the necessary remedies.

The Samaritan railroad official may find at any moment a field of labor, where by a prompt application of his useful knowledge many could be saved from torture, danger, and even the grave. Often terrible railroad accidents occur in portions of our country which are sparsely populated. Perhaps no physician is at hand, and hours may pass before the assistance of one can be secured. In such a case the Samaritan could render invaluable help; and even with medical aid at hand, it is often insufficient for the number injured. Thus the skillful Samaritan would become a most useful friend in this need.

The Samaritan unknown, be he in the factory, the foundry, the shop, the mill, at home, or upon the highway, may often find an opportunity to render his fellow-man an assistance the value of which might be the price of human life. A Samaritan workman in a factory in an adjoining town met with a serious accident, by which his hand and arm were terribly shattered. Retaining consciousness and courage, he instructed his comrades how to apply an elastic suspender to his wounded arm, and thus saved himself from bleeding to death before medical aid arrived.

The first lecture delivered to the Kiel Samaritans by Professor Esmarch treated of the construction of the human body, functions of its various parts, circulation of the blood, and mechanism of the respiratory organs. Illustrated charts showing the different parts of the human form were used, and the language of the lecture was so free from technical terms that all could readily comprehend. After the lecture an hour was spent in a practical application of the various bandages, and each one was especially instructed in the use of the famous Esmarch three-cornered bandage, which has done such good work on the battle-fields. This bandage can be applied in thirty-two different ways, and the operation is so simple that one easily understands its use.

The second lecture described the difference between arteries and veins between arterial and veinal bleeding, and explained the proper remedies to be used in treating cuts, stabs, shot-wounds, and contusions, and how to still the flow of blood immediately after the wound is received and before medical aid can be secured.

The third lecture treated of bone-breaking, dislocations, sprains, and similar injuries, showing the various applications of the bandages. This

lecture discussed thoroughly the treatment of burns and scalds, and what remedies were to be applied immediately after the accident.

The fourth lecture was upon the subject of freezing, drowning, suffocation, unconsciousness, poisoning, and the mode of producing artificial respiration.

The fifth lecture discussed the subject of transportation of injured persons from the place of accident to their homes, the hospital, or the doctor.

The professor discussed at length the mode of transportation to be used, how the injured should be handled, and how to relieve him from pain, and to prevent further injury during transportation.

After the lecture course followed the examination of those who wish to become samaritans. The examination was part oral, part in writing, and part in a practical application of the various principles taught. A successful examination entitles a person to a certificate of membership.

The aim of the institution is so humane, the principles taught so simple, valuable, and instructive, the necessity of its existence so great, that its popularity is certain, and its success assured, if some leading gentlemen and ladies will take the matter in hand, and show to the people of the United States the inestimable value of the knowledge which every samaritan must possess. The success and popularity of the samaritan organization here is great. The same result will follow the establishment of similar institutions in the United States.

JAMES T. DUBOIS,
Consul.

UNITED STATES CONSULATE,
Aix-la-Chapelle, May 11, 1882.

HOUSE BUILDING IN VIENNA.

REPORT BY CONSUL-GENERAL WEAVER.

From an exhaustive article appearing recently in the "Statistische Monatsschrift" of this city for April, 1882, on house building in Vienna from 1843 to 1881 (written by J. Pizzala, K. K. Rechumgsrath), I beg to collate the following data, and to refer those interested in such matters to the article itself for further details.

In order, however, to properly appreciate these statistics, it will be very necessary to bear in mind the character of the architecture of the houses in Vienna, viz, that they are generally of enormous size, consisting of from four to six stories above ground, and furnishing dwellings for from ten to twenty families, averaging, according to the census of 1880 for the entire city proper, nearly twelve families per house, or, specifically, 12,220 houses, 141,910 families, and 705,402 inhabitants.

The number of houses in Vienna for the years indicated, as shown by the census in those years, was as follows:

Year.	Number.	Increase.
1840	8,843	.....
1857	9,502	1,159
1869	10,250	748
1880	12,220	1,970

From which it would appear that during the forty years between 1840 and 1880 the increase was 3,877 houses or 46.47 per cent. It should be noted, however, that the above number shows the absolute increase and not the total number of new houses constructed, which between 1843 and 1881, for which years alone the statistics are sufficiently complete to make a reliable calculation, the number of new houses amounted to 5,526. The difference evidently is to be accounted for by the destruction and removal of old houses, estimated during 1843–'81 at 1,650 houses, or an average of about 42 per year.

The foregoing data must be understood as referring to the ten districts of the city contained within the octroi lines, and not including the thirty-five suburbs and villages with their 377,933 inhabitants, which comprise practically a part of Vienna, and which, for police purposes, are regarded as forming one and the same city.

The new constructions and modifications in Vienna proper during 1843–'57, reported for every five years, were as follows:

Period.	New buildings.	Reconstructions.	Total.
1843–'47	202	205	407
1848–'52	72	123	195
1853–'57	175	701	876
Totals	449	1,029	1,478

The smallest number of houses built in any year was in 1848, the year of the revolution, when only five new houses were constructed. The immediate effects of this outbreak on the city, together with a reduction from twenty to ten years of the period during which new houses should be free from taxation, together with the increase of the price of material on account of the erection of the Vienna arsenal and the building of the Semmering railway, the building of houses in Vienna suffered a serious check for several years, amounting in 1848–'52 to only 72 new houses. The price of brick, which from 1843 to 1850 varied from 15 to 17 florins per thousand, increased in 1851 to 19 and 20 florins, and in 1852 to 22 florins. But that the cause of the reduced house construction was not altogether on account of the price of brick may be seen from the fact that their manufacture, notwithstanding the increase of their price, fell off quickly from 122,000,000 in 1850 to an annual average production of 68,000,000 in 1854–'56.

On December 20, 1857, in consequence of the great demand for apartments and excessively high rents, which threatened to become a calamity, the Emperor issued a proclamation in regard to the destruction of the city walls and the filling up of the surrounding moat, and prolonged the period of freedom from taxes from ten to thirty years, in order to encourage the erection of houses in the city. The demolition of the walls continued throughout 1858–'59, and 1860 at once shows the great impetus resulting therefrom, for the new buildings increased from 54 in 1857 to 169 in 1860, or, while the average yearly construction from 1843 to 1857 was barely 30 houses, the annual average for 1858–'60 was 101 houses.

But the progress of the next twenty-one years, particularly in 1871–'75, was still more extraordinary, as may be seen from the following table, grouped for convenience sake in periods of five years:

Periods.	New buildings.	Reconstructions.	Total.
1861–'65	1,390	1,299	2,689
1866–'70	1,290	774	2,064
1871–'75	1,708	2,369	4,077
1875–'80	772	1,404	2,176
1880	130	245	375
Total	5,290	6,091	11,381

It would appear, therefore, that during the thirty-nine years 1843–'81 there were erected in Vienna proper 6,042 new houses, and reconstructed, enlarged, or modified, 7,936 houses. The extraordinary annual average of 341 buildings erected in 1871–'75 resulted from several special causes: 1st. The exemption from taxation for twenty-five years of all dwelling-houses which should be finished before or during the year 1876. 2d. The establishment in Vienna of numerous joint-stock companies, which stimulated in an excessive degree the construction of houses, by providing those wishing to build with the necessary means and capital, or undertaking the same at their own risk and expense as a profitable speculation. And, lastly, the financial and industrial crisis of 1873, which had been brought about by excessive manufactures, either diverted idle capital in this new channel or compelled the erection of smaller houses in the outer districts to suit people of reduced incomes.

But the development of 1868–'80 was not confined to the city of Vienna proper, but the important suburbs of Wühring, Hernals, Otta, Kring, Fünfhaus, Unter-Meidling and others partook in an important degree of the same progress, for during 1868–'80 in these immediate suburbs there were erected 2,576 new dwelling-houses, and reconstructed and enlarged 3,320 houses, while in the various villages further removed, but forming part of the police district of Vienna, the new houses erected were 623, and the modifications were 856, which was doubtless brought about by the extension of cheap transportation from the inner city to these suburbs, especially by means of the tramways, and also by the fact that food and rent were less expensive in the suburbs, particularly the former, which is required to pay heavy octroi duties on entering within the "lines" of the city proper. It is probable also that this increased tendency to reside in the suburbs may be one of the principal causes why during the last six or eight years a marked decrease is observed in the construction of dwelling-houses within the lines; although on the contrary it would appear that a greater reaction had set in in the suburbs than in the inner city, seeing that during 1871–'75 there were erected in the suburbs 1,790 new buildlings against 695 in 1876–'80.

The price of brick from 1870 to 1880 experienced enormous changes, keeping pace very much with the demand, viz: in 1870 they cost 26 florins per 1,000, 30 florins in 1871, from 30 to 35 florins in 1872, being the highest price reached. In 1874 they had fallen to 23–24 florins, in 1875 to 20–22 florins, in 1876 to 16–20 florins, in 1877 to 14–16 florins, or the lowest price during the decade. In 1878 the price went up to 16 florins, in 1879 it fell to 15 florins, and in 1880 varied between 15 and 20 florins, against an average of 16 to 25 for year 1843.

If now we combine Vienna and its suburbs during the last fifteen years, viz, 1866–'80, we have the following results for the buildings erected and reconstructed:

Period.	New buildings.	Reconstruction.	Total.
1866–'70	1,966	2,759	4,725
1871–'75	3,498	4,581	8,079
1876–'80	1,437	2,421	3,858
Total	6,701	9,761	16,662

The foregoing shows an annual average of 460 new buildings and 651 reconstructions; and if the character of the buildings be taken into account, in that each new structure was sufficiently large to accommodate possibly fifty people, the wonderful progress made during the period under consideration will appear more striking, and show likewise that few, if any, of the capitals or important cities of Europe can equal Vienna in the increase and development of her dwelling-houses during the last 15 or 25 years.

In concluding, I might remark that the architecture of the dwelling-houses of Vienna is characterized not only by size, but also by solidity, constructed almost exclusively of brick, stone, and iron, except the floors, which are parquetted in wood. The walls are of enormous thickness, frequently from three to four feet, and the staircases of cut-stone, so that they are comparatively fire-proof. The rents are high, and the taxes paid the government about forty-five per cent. of the rental. They are constructed on the flat system, but without elevators, and generally, except in the most fashionable quarters, the houses are cut up into very small apartments to suit the demand, for only the wealthy classes can afford the luxury of large unoccupied rooms. Apartments not rented are not taxed, hence owners are less inclined to reduce extravagant rents. As, however, Vienna is about the only city in the empire which offers to retiring merchants and wealthy noblemen the comforts and attractions of a residence suited to their requirements, this capital absorbs from the whole country a class of people who are willing and able to pay the price of luxury and pleasure. Otherwise the wonderful progress and development in the buildings and adornments of this city would bankrupt not only the projectors but the nation. But if the financial condition of the government could be so improved as to reduce the present enormous taxation on food and real estate, and thus cheapen the necessaries of life in this city, and the municipality would furnish additional and rapid transportation to the suburbs, there would remain no longer a question but that the future of Vienna would eclipse the past, and place her in point of progress in the van of the capitals of the world.

JAMES RILEY WEAVER,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
Vienna, May 6, 1882.

THE WINE INDUSTRY OF THE MARNE.

REPORT BY CONSUL FRISBIE, OF RHEIMS.

The manufacture of wine in what is now the Department of the Marne is of prehistoric date. Some authors assert that the vine was introduced into Gaul by the Romans (Rheims then being the capital of eleven tribes or cantons of Belgic Gaul); yet it is contended on the other hand, with much apparent reason, to have been cultivated long before their arrival, even before the advent of the Phoceans, and of this there can be but little doubt.

History informs us that on the occasion of the marriage of Ennenus, chief of the Phoceans, with Palta, the daughter of Nennus, King of the Salii, who inhabited the coasts of Provence, this princess, following the custom of the country, presented to her chosen bridegroom a tankard full of wine and water.

Cato the elder informs us that, in his day, vine plants were brought into Italy from Gaul; and Cicero, in his speech on behalf of Fonteins, refers to the great trade in wine carried on by the Gauls.

It was, without doubt, the Gauls who first invented and used casks for storing wine.

As far as the champagne country is concerned, there can be no doubt that the vine has been cultivated since the most remote times; the dry and chalky soil of the surrounding hills and valleys being specially adapted to the cultivation of the vine.

Domitian ordered all the vines in Champagne to be uprooted and destroyed. He had an idea that the culture of the vine caused people to neglect that of cereals and general agriculture, and he also feared that the desire of drinking wine would attract the barbarians to the country. It was not until about two centuries later (280 A. D.) that they were replaced by the Emperor Probus. The best plants of that time were obtained from the Hermitage and were due to the Cardinal de Tournon.

The oldest testimony that exists, says the Abbé Gérusez, to Champagne wines is found in the short will of St. Remy, towards the end of the fifth century, who left to various churches the vineyards which he owned at Rheims and Laon, together with the villeins employed in their cultivation. But during succeeding centuries, the incessant wars of which Champagne was the field of operations greatly reduced the cultivation and put a stop to the circulation of the produce. About the middle of the ninth century we find the worthy Bishop Pardulus, of Laon, imitating Paul's advice to Timothy and urging Archbishop Hincmar to drink of the wines of Epernay and Rheims for his stomach's sake. The reputation of these wines came after that of Burgundy. Under Francis I and Henry II the wine grown on the banks of the Marne first came into court favor.

Report has it that Charles V, Francis I, Henry VIII, and Leo X had each of them an agent at Ay to procure the best vintage wine. And it is also said that Francis I and Henry IV took the title of Lord of Ay. Nevertheless its reputation really dates only from the reign of Louis XIV, and perhaps the honor of it should be ascribed to the great Colbert.

It was Dom Perignon, cellarer and afterwards steward of the Abbey of Houtvillers, who, in 1688, discovered the secret of making white

sparkling wine, for before his time only wine of a natural, *i. e.*, gray or straw color was produced. This statement is also reported in the history of the Abbey of Houtvillers, volume iv, and the historian also states that Dom Perignon was also the inventor of the tall slim glasses which are still used to drink effervescing wine from, and that it was he, too, that originated the idea of replacing by a cork stopper the piece of hemp soaked in oil, which was, up to that time, used to close bottles by tying it round the neck with a string. There is no trace of wire being used until about 1760. In spite of the success which the sparkling wine at once obtained, the manufacture of it was undertaken with much caution. In 1780 five or six thousand bottles of it was considered a large number to be produced by a merchant at Épernay, and in 1787 it was regarded as quite one of the wonders of the world that a Rheims wine house (which at the present day counts its bottles by the millions) adventured the production of 50,000 bottles.

The most renowned places for the production of red wine were Bouzy, Verzenay, Mailly, Verzy, and Rilly. It was only from 1805 that any attempt was made to make sparkling white wine in these districts, but nowadays nearly the whole produce of the hilly regions round Rheims is employed in the manufacture of sparkling wine.

This new channel, found by the wine trade of the Champagne district, was a very happy and profitable one for that district, since, although its red wines were in great demand, it had to compete with the fine wines of Bordeaux, and must have suffered largely from this formidable competition.

It would seem as though, with the increase in demand for sparkling wines, there should have been a corresponding increase in the area of the vineyards, but the very opposite has been the case. From 25,000 hectares (61,700 acres) under cultivation in 1819 the area has dwindled to 16,500 hectares (40,700 acres) at the present time. This arises from the fact that the plants furnishing the ordinary red wine have been destroyed, as that wine could not sustain competition with wines of like kind produced in the south of France. As for the increase in exportation, the vineyards are sufficient for it, in consequence of the employment of the whole of the crop (the first pressing) in the preparation of white wine.

In 1801 Rheims exported 9,000 casks of wine and a not less quantity in bottles, the whole valued at 12,000,000 francs. The rest of the wine-growing districts (Épernay, Ay, and Châlons) exported 3,000,000 francs in value.

In 1819 the revenue from wine to the entire district had fallen to about 8,000,000 francs, including both the wine in casks and in bottles.

In 1822 about 4,000 casks were sent to England, this amount being about a fourth of the possible export, but the very high duties levied by that country on French wines prevented any increase.

In 1832 the yield of the vintage was 480,000 hectoliters, of which only about 60,000 hectoliters consisted of white wines, sparkling or non-sparkling; the balance being choice and middling red wines.

In 1838 the champagne wine trade employed a fixed capital of 10,000,000 francs and a floating capital of 30,000,000 francs. In this year the exports to all parts of the world amounted to 6,000,000 bottles of sparkling wine, at an average price of 3 francs per bottle. Since then the price of wine has increased in large proportion. The vine-dressers are computed at 2,500 and the other workmen at 2,000. The number of bottles used during the year was 8,000,000. The wages of workmen varied

from 25 sous (cents) to 60 sous per day, and there has been but a slight advance, if any, in the wages of workmen to the present time.

From 1788 to 1850 wine was worth per hectoliter, as follows: 1788, from 30 to 32 francs; 1800, from 20 to 25 francs; 1810, from 30 to 35 francs; 1820, from 25 to 27 francs; 1830, from 20 to 22 francs; 1850, from 15 to 70 francs. Since then prices have largely increased in a steady advance.

At the present time (1882) the wine trade in Rheims numbers 52 houses, employing 1,600 people. Other houses outside of Rheims and in the neighborhood employ 700 hands, and the glass factories at Rheims and in the neighborhood employ for the manufacture of bottles 950 workmen.

The following table taken from the records kept by the Rheims Chamber of Commerce is an exhibit of the wine industry of the department of the Marne in amount, in stock, and movement, for each year ending April 1, since 1845:

Year.	Amount of wine on hand stored in cellars and vaults, computed in quart bottles.	Number of quarts in bottles, exported to foreign countries.	Number of bottles sold to wholesale wine merchants outside the champagne trade and to consumers.	Number of bottles sold by champagne firms to champagne firms within this department.	Total movement.
1845	23, 285, 818	4, 380, 214	2, 296, 438	2, 577, 738	9, 213, 390
1846	22, 847, 971	4, 505, 308	2, 510, 605	2, 153, 607	9, 169, 520
1847	18, 815, 367	4, 711, 915	2, 355, 366	1, 708, 204	8, 775, 485
1848	23, 122, 994	4, 859, 625	2, 092, 571	1, 234, 678	8, 186, 874
1849	21, 290, 185	5, 686, 484	1, 473, 966	884, 025	8, 044, 475
1850	20, 499, 192	5, 001, 044	1, 705, 735	1, 130, 960	7, 837, 739
1851	20, 448, 915	5, 866, 971	2, 122, 569	1, 920, 435	9, 909, 975
1852	21, 905, 479	5, 957, 552	2, 162, 880	3, 234, 985	11, 355, 417
1853	19, 376, 967	6, 355, 574	2, 385, 217	4, 156, 718	12, 897, 509
1854	17, 757, 769	7, 878, 320	2, 528, 719	5, 791, 180	16, 198, 219
1855	20, 922, 955	6, 895, 773	2, 452, 743	5, 197, 094	14, 545, 610
1856	15, 957, 141	7, 137, 001	2, 562, 039	4, 262, 265	13, 961, 305
1857	15, 228, 294	8, 490, 198	2, 468, 818	4, 669, 683	15, 628, 699
1858	21, 628, 778	7, 368, 310	2, 421, 454	3, 764, 445	13, 554, 209
1859	28, 328, 251	7, 666, 633	2, 805, 416	3, 281, 010	13, 753, 609
1860	35, 648, 124	8, 265, 395	3, 039, 621	4, 403, 530	15, 708, 846
1861	30, 235, 260	8, 488, 223	2, 697, 508	5, 415, 599	16, 601, 330
1862	30, 254, 291	6, 904, 915	2, 592, 875	3, 977, 886	13, 475, 676
1863	28, 013, 189	7, 937, 836	2, 767, 371	4, 316, 249	15, 021, 456
1864	28, 466, 975	9, 851, 138	2, 934, 996	5, 685, 484	18, 471, 618
1865	33, 298, 672	9, 101, 441	2, 801, 626	5, 429, 663	17, 332, 730
1866	34, 175, 429	10, 413, 455	2, 782, 777	4, 742, 761	17, 938, 793
1867	37, 608, 716	10, 283, 886	3, 218, 343	7, 575, 430	21, 077, 659
1868	37, 968, 219	10, 876, 5~5	2, 924, 268	6, 077, 752	19, 878, 605
1869	32, 490, 881	12, 810, 194	3, 104, 496	6, 402, 839	22, 377, 529
1870	39, 272, 562	13, 858, 839	3, 628, 461	7, 870, 964	25, 358, 264
1871*	39, 984, 003	7, 544, 323	1, 633, 941	3, 209, 489	12, 387, 753
1872	40, 099, 243	17, 001, 124	3, 367, 537	11, 522, 665	31, 891, 326
1873	45, 329, 490	18, 917, 779	3, 464, 059	10, 381, 079	32, 762, 917
1874	46, 573, 974	18, 106, 310	2, 491, 759	12, 545, 076	33, 143, 145
1875	52, 733, 674	15, 318, 345	3, 517, 182	8, 759, 802	27, 595, 336
1876	64, 658, 767	16, 705, 719	2, 439, 762	7, 458, 562	26, 604, 043
1877	71, 398, 726	15, 882, 964	3, 127, 991	7, 714, 884	26, 725, 799
1878	70, 183, 863	15, 711, 651	2, 450, 983	9, 515, 123	27, 677, 757
1879	65, 813, 194	14, 844, 181	2, 596, 356	7, 403, 757	24, 844, 294
1880	68, 540, 668	16, 524, 593	2, 666, 561	11, 518, 339	30, 709, 493
1881	54, 505, 964	18, 220, 980	2, 399, 924	12, 332, 527	33, 953, 431

* From April 1 to September 1; balance of year not complete.

A statement for the year ending April 1, 1882, is not contained in the foregoing table for the reason that the record for that year has not been

completed as yet by the chamber of commerce. The yield of the vintage for the year was unusually large, but the wine produced was not of the best quality, being light and weak, by reason of the continual rainy weather which prevailed during the greater part of August and September, preventing the grapes ripening in a satisfactory manner and destroying the saccharine matter to a large extent.

At this time the prospects of an abundant vintage for the harvest of 1882 are most encouraging, the vines being in excellent condition and the show of fruit very fine. If no accident happens by reason of frost or otherwise, cultivators and merchants unite in predicting an unprecedented harvest this season.

JOHN L. FRISBIE,
Consul.

UNITED STATES CONSULATE,
Rheims, France, May 17, 1882.

THE SPONGE TRADE OF THE BAHAMAS.

REPORT BY CONSUL M'LAIN, OF NASSAU.

Next to the pine-apple business the sponge trade is the most important industry of the Bahamas, bringing considerable money into the colony and furnishing steady and lucrative employment to several hundred vessels and several thousand persons.

Forty years ago the gathering and shipment of sponges was practically in these islands. The people found so much more profit and excitement in the business of "wrecking" that the ordinary methods of procuring a livelihood were not in much favor.

Gradually, however, as the erection of light-houses upon the exposed points and the substitution of steam for sailing craft lessened the number of wrecks, the colonists began to cultivate the soil and to explore the depths of the sea in the pursuit of wealth.

At first sponges were divided into only two classes, the coarse and the fine, the former bringing about $5 per cwt., and the latter about double that sum. Sponges are now divided into many varieties, the principal of which known to the trade here are as follows, in the order of their value, the first being the best, viz: Sheep-wool, white reef, abaco velvet, dark reef, boat, hardhead, grass, yellow, and glove. Of some of these varieties there are several grades, designated by numbers, all being useful for mechanical, surgical, and bathing purposes. Bahama and Florida sponges are of about equal value, both kinds being inferior in texture and market value to those of the Mediterranean.

From the opening of the trade in the Bahamas up to the year 1864 the amount of sponge gathered was small, averaging only 3,331 pounds per annum, valued at $26 per cwt. During 1863-'64-'65 the business of blockade running so engrossed the attention of the Bahamians that nearly all legitimate business was suspended, and the sponge industry sank to a low ebb. In the years immediately subsequent to our civil war the trade grew brisker until the outbreak of domestic troubles on the adjacent island of Cuba gave it a check, the Spanish authorities withdrawing the privilege of fishing for sponges upon the Cuban coast, lest the spongers might carry on a contraband trade with the insurgents. In 1878, the insurrection having been substantially quelled, the Spanish consul at Nassau issued over one hundred licenses, at $25 apiece, to

Bahamian vessels to sponge in Cuban waters, and the trade was rapidly reviving when the jealousy of the Spaniards was aroused, and all the licenses were peremptorily revoked. Since then the Bahama spongers have confined operations to their own waters, but with such assiduity that new fields have been discovered, and the yield has materially increased.

The vessels employed in sponging are small craft, their average being about ten tons burden, each vessel carrying from six to twelve men. These vessels take on board about six weeks' provisions and start out coasting along the banks and reefs, where the water is shallow, and among the islands, for in such localities the sponges are found. In case of a storm the little craft takes refuge inside the coral reefs or under the lee of an island. The sponges are readily seen growing upon the rocks, reefs, and shallows, for the water is marvelously clear, and they are brought to the surface by means of iron hooks fastened to long poles, or by diving. When first caught they are found to be covered with a soft gelatinou substance, full of life, and as black as tar, the sponge proper being really only the skeleton or support of this living organism.

The day's catch is spread upon the deck so as to kill this living covering, which in decaying emits an odor by no means as fragrant as that of frangipanni. When a sufficient quantity of sponge has been gathered to warrant it the spongers go ashore, build a pen or "crawl" of stakes at the water's edge, and place the sponges therein, when the action of the tide helps to remove the black covering, the process being completed by pounding the sponges with sticks. Having been cleansed in this manner, the sponges are strung upon small palmetto strips, each string containing three or four sponges, being called a "bead," and with this cargo the vessels return to Nassau. A cargo will range in value from $75 to $300, according to quantity, quality, and demand.

The sales and handling of sponges are substantially controlled by what is known as the "Nassau Sponge Exchange Company, Limited," an organization holding a charter from the colonial legislature, with a capital of £600, and possessing certain privileges. The company has erected a commodious building upon one of the wharves, and here all the sponges are sold subject to certain taxes and restrictions. No person is permitted to buy until he has become a member of the exchange, under certain conditions, and a seller who attempts to dispose of his cargo outside of the exchange will soon be put under the ban. Sales are made upon every week day, except Saturday, at 11 o'clock a. m., each buyer offering his tender in writing and privately, and he is expected to make some offer for each lot on sale.

As soon as the daily sale is concluded, the sponges are hauled away to the packing yards where they are assorted and clipped into good shape. They are then put into tubs or vats of lime-water to soak for several hours, and are afterwards spread upon canvas to bleach and dry in the sun. Next they are pressed by machinery into bales about 3 by 2 feet in size, each containing 100 pounds, the packages being covered with coarse bagging securely sewed and corded, and are then ready for shipment. All the work bestowed upon the sponges from catching to shipment, except the purchasing at the exchange, is performed by the native blacks.

There are at present only about a dozen qualified buyers of sponges in Nassau, nearly all of whom buy exclusively for houses in America and England.

The American trade is monopolized by a few firms in New York

(through resident agents in Nassau), the leading houses being as follows, viz: Messrs. A. Isaacs & Co., Mansell Birnbaum & Co., Raboteau & Moses, Lasker & Bernstein, McKesson & Robbins, and Wrightington & Jackson.

The average current market value of sponges in this colony for the past year or two is substantially as follows, which represents their cost on shipboard, viz: Sheep-wool, 75 cents per pound; white reef, ditto; abaco velvet, 55 cents; dark reef, 35 cents; boat, ditto; hardhead, 30 cents; grass, 20 cents; yellow, ditto; glove, 15 cents. These are for the best grades of each variety, and are the average of prices, the absolute prices, of course, changing at times, according to the laws of trade.

Bahama sponges are shipped to the United States and Great Britain, with an occasional lot to Paris. Up to three years ago, Great Britain got the bulk of the trade. Since then the United States has taken a greater part of the sponges. In 1881 the total value of the sponges shipped from these islands was $150,000, of which $36,357 worth went to England, and $113,643 went to the United States. The following figures will show the volume and course of the sponge trade of the Bahamas for the last eight years:

Year.	Exports to Great Britain.	Exports to United States.	Total.
1874	$32,300	$44,000	$76,500
1875	42,600	34,400	77,000
1876	52,000	35,000	87,000
1877	59,300	30,700	90,000
1878	69,927	53,073	123,000
1879	95,000	70,000	165,000
1880	66,000	102,428	168,000
1881	36,357	113,643	150,000
1882 (first quarter only)	.....	82,664	.....

As appears above, the first quarter of the present year shows a signal increase in the trade with the United States, the amount shipped during January, February, and March being more then two-thirds as much as the total for the year 1881, which year was itself an improvement over all the preceding ones.

There was no special increase during that quarter in the shipments to Europe. This sudden increase in shipments to the United States was owing to the discovery of a new and extensive field of sponges near the island of Eleuthera, only 60 miles distant from Nassau, the product of which the American agents eagerly bought up.

The water on the new field is from 5 to 8 fathoms in depth, making the gathering of the sponges tedious and laborious. It is thought that the field is a very extensive one, extending over many miles, and the sponges are, so far as known, all of the sheep-wool or most valuable variety.

The majority of the sponges found up to this time are of an extra large size, and they will not bear cutting to advantage, since the inner portions seem to be very tender. A medium sized and solid sponge would have been more valuable.

During the last quarter this field was actively worked, but a sudden interruption has occurred, caused by the fact that myriads of small fish called "sailors" have invaded the grassy bottom, stirring up the mud

to such a degree as to prevent the sponges from being seen. Old fishermen give it as their opinion that the sponges can be gathered to advantage in this field only during a portion of the year when the water is still and the "sailors" are absent. If this be true, it will detract somewhat from the value of the new find.

If the colonists could handle and ship the sponges on their own account, as they do with their pine-apple crop, the trade would be of more benefit to the islands; but their control ceases when the sponges are sold at the exchange, and all subsequent profits after shipment go to the foreign purchasers.

The business of gathering, curing, and packing, however, brings about $150,000 of foreign capital into the colony every year, which is largely sent to the United States to purchase materials for the vessels, provisions for the men, and for general purchases; and so any increase of the sponge industry will enlarge the amount of goods which the colonists will be able to buy of us. In fact, the trade relations of the Bahamas are now so intimate with the United States that the prosperity of the former is directly beneficial to the latter; and we do not overstate the truth when we assert that this colony, although politically a "dependency" of Great Britain, is in reality, so far as an increasing profitable trade and commerce is concerned, a "dependency" of the United States. A liberal spirit on the part of our government and fair and honest dealing by our merchants and manufacturers are all that is needed to retain our present trade with the Bahamas, and to materially enlarge the same, as the colony itself develops its natural resources and prospers.

THOMAS J. McLAIN, JR.,
Consul.

UNITED STATES CONSULATE,
Nassau, N. P., Bahamas, May 25, 1882.

THE NEW ZEALAND COAL FIELDS.

REPORT BY CONSUL GRIFFIN, OF AUCKLAND.

The constantly increasing demand for coal in California, and the existence of a coal famine in Victoria and South Australia, have directed my attention to the condition of the coal fields of this colony. The average New Zealander has little or no idea of the vast stores of wealth that are bound up in his island home.

A few years ago there was but one point in the whole of the vast territory of the Pacific which had begun a modest competition with the American and English coal trade. I refer to New Castle, in the colony of New South Wales. The people of Australasia may well be proud of this interesting mining depot situated at the mouth of the Hunter River. Vessels of the largest size can ride safely in the harbor and load immediately at the mines.

The coal fields there are of no mean proportion. They extend fully 700 miles north of New Castle. The average annual output of the mines is about 1,550,000 tons. The seams vary from 3 to 30 feet in thickness, and the quality of coal is regarded as the best in the world. Fully one-fourth of the products of the mines is consumed in the colony of Victoria, and I learn from the last annual report of the department of the

mines of New South Wales, that the people of that colony begin to fear a strong competition from New Zealand for the coal trade.

Some of the specimens of New Zealand coal, exhibited at the International Exhibition at Sydney with coke made from the same, were pronounced to be of very superior quality. This was especially the case with the Brunner and the Pit Heath coal from Greymouth, and that from the Bay of Islands. The coal from the latter place is now very generally admitted to be quite equal to the best coal from New South Wales, and, moreover, it is said to burn with much less ash. Indeed the secretary of the mines of New South Wales expressed the opinion that the markets which that colony had hitherto monopolized must, in the near future, be shared with New Zealand. After mentioning the fact that the Bay of Islands coal can be purchased for the Australian ports from 12 shillings to 12 shillings and sixpence ($2.88 to $3.00) per ton, he says:

> The New Zealand coals are of such quality as to render it possible that they may enter into competition with ours in markets outside of that colony.

Coal is now exported from here in considerable quantities to China and Japan, and also to Honolulu, Hawaiian Islands.

DISCOVERY OF COAL IN NEW ZEALAND.

In studying the history of the mines of this colony I regret not to be able to give the name of the person who first discovered coal in New Zealand. It is probably unknown. There is no doubt, however, that coal was first found in the North Island, and probably in the province of Auckland.

After a long and diligent research through the various works on New Zealand and the other Australian colonies, I learn that the first reference to the existence of coal in this colony is in a work by Dr. R. J. Jamison, entitled "New Zealand, South Australia, and New South Wales; a record of recent travels in these colonies." Dr. Jamison was the surgeon of an emigrant vessel that sailed from Liverpool for Adelaide in 1838. After his arrival at Adelaide he made a tour through the colonies of Australia. In 1839 he visited the islands of New Zealand, which were not then under the protection of the British flag. In this volume, on page 314, while describing a visit to Tauranga in 1839, he says:

> Here, according to Mr. Bidwell, is to be witnessed the actual formation of coal. It is in some places a foot in thickness, and quite recent, consisting of nothing but leaves, &c., of the living plants of the country. It is regularly separated by layers of soft earth, of just the color and appearance which the clayless strata which the coal measures present, although entirely formed of partially decomposed pumice.

The coal reported to have been seen at Tauranga has never been worked. Until recently that district was in the possession of the Moors, or natives. Dr. Diffenbach, who traveled extensively through New Zealand in 1840 and 1841, was able to show that coal was widely distributed throughout both the North and South Island.

In 1849 coal was known to exist on the banks of the Tangarakaw, a tributary of the Wanganni River, in the province of Wellington, but nothing has as yet been done to work the deposit. Coal was also discovered at Motupipi in 1840, shortly after the establishment of British authority in New Zealand.

In 1845 an unsuccessful attempt was made by the settlers at Wellington to obtain a supply of fuel from this coal seam, and a sample ton of it was tried on board Her Britannic Majesty's sloop of war Inflexible, in 1849. Mr. Tucker, the chief engineer of that vessel, made a favorable report of this coal. His report is dated the 29th of March, 1849,

and is, I think, the first official report ever made of a trial of New Zealand coal. It was not, however, until 1858, when coal was discovered in the Drury district, 24 miles from Auckland, that a systematic effort was made to develop the coal mines of the colony. The coal seam in the Drury district was discovered by the Rev. Dr. Purchas, of Auckland, and as it proved to be fully 6 feet in thickness attracted no little attention throughout the colony.

A company was at once formed for the purpose of working it. It was called the "Waihoihoi Coal Company."

It was soon found that the cost of carrying the products of the mine to Auckland would be very expensive, at least more expensive than the use of firewood, for timber was abundant in the neighborhood. A proposal was made to lay down a short tramway to the nearest navigable creek emptying into the Manukau harbor; but this proposal was not acted upon, although every one admitted its practicability. It is probable, however, that there was not sufficient demand for coal to justify the necessary outlay. The population of the entire colony of New Zealand was then not so large as that of Auckland at the present time. The time, however, was near at hand when the coal fields of the colony were to be developed in a manner not then thought of. The Maoris at that time were not only peaceably inclined, but were unusually friendly with the whites. In 1860 a dispute arose at Waitara, in the province of Taranaki, which culminated in a sanguinary conflict, and in a short time the war extended to the Waikato district. The whole of that vast fertile territory was at that period owned by the Maoris. No European was ever permitted to purchase a single acre of land. In 1863 the colonial government took measures to protect the European settlers in the neighborhood of Auckland, and gradually pushed the war into the heart of the enemies' country. About this time a landslip disclosed the existence of coal at Kupakupa on the banks of the Waikato River. Up to this time no European craft had ever been permitted to float upon this broad and beautiful stream, the prince of New Zealand rivers. But the accidental discovery of a thick coal seam on the banks of the river between eighty and ninety miles from its mouth was indeed a fortunate circumstance in the war with the Maoris. Steamers were placed on the Waikato to convey troops and supplies to the scene of action. The coal seam at Kupakupa was situated at an elevation which enabled the products of the mine to be shot direct into the bunkers of the steamers. The seam was opened up by the government in order to provide fuel for the steamers, and this was the first seam of coal that was ever successfully and systematically worked in New Zealand. The Waikato district is now connected by rail with Auckland, and the coal seams there extend over a very large area. These mines have been opened up on a seam varying from eighteen to fifty-five feet in thickness. Valuable bands of ironstone are also found in that district, which yield fully forty per cent. of metallic iron.

BROWN COAL.

The coal found in the basins of the Waikato and Mokau, and also on most of the tributaries of the Whanganui, is a species of brown coal belonging to a tertiary age. The seams are covered with bituminous shales, sandstone, conglomerates, and solid quartzites, such as are often met with in the center of Europe, especially within the range of the brown coal deposits of Germany and Austria. The topmost layers generally consist of tabular limestones, often protruding at the top of cliffs. This geological fact will give the curious observer an ample opportunity to satisfy himself that the limestone formations in both the

north and south island of New Zealand overlie beds of brown coal. This coal is, of course, not so good as the coal at Greymouth or at the Bay of Islands, because it belongs to a later period, but coals of the same nature and of a far worse quality are found and extensively mined in Austria and Germany.

In the south island of New Zealand deposits of brown coal are found near the Malvern Hills, 30 miles from Christchurch, and vast areas of it extend and underlie the tertiary rocks of the higher portions of the great Canterbury plains. In Otags it extends near the Molyneax river, over at least fifty square miles forming hills from 500 to 1,000 feet in height. In this formation there are several seams of good coal, varying from 6 to 20 feet in thickness, and in passing along the seashore, one section of this coal fully three miles in length and fifty-six feet thick is exposed to view. It is estimated that this district alone contains over 100,000,000 tons of accessible coal. Several mines have been opened out and one in particular, the Clutha mine three miles from the river of that name, has been successfully worked. Within six miles of Dunedin is another important basin called the Green Island and Saddle Hill. Two of the seams there have been opened from 7 to 9 feet thick and are successfully worked. There is an area of 10 square miles in the vicinity of Green Island, containing a seam 18 feet thick, capable of yielding over one hundred millions of tons. Owing to the soft nature of the roof and floor it has been the practice to work only 6 feet out of the center of the seam, about two thirds of the coal being left and wasted. This extravagant method is occasioned by the scarcity and high price of timber in Otago, suitable for propping the mines.

There is still another great area of brown coal on the western seaboard of Otago, east of the Kakanui mountains. At Kartangata there is an important field of about 40 square miles.

The seams worked there are about 27 feet thick, and the product is very good, having a hard splintery fracture and laminated structure. A fire-damp explosion occurred there in 1879, killing thirty miners.

Indeed, in all the provinces of New Zealand there are many large deposits of this coal which have not yet been worked, but which some day will prove of great value to the people.

BLACK OR PITCH COAL.

The black coal fields of New Zealand are very extensive. They are found in both the north and south islands. They occupy large areas in the provinces of Auckland, Nelson, Canterbury, and Otago. This coal belongs to a secondary or mesozoic age, and is, I think, amongst the best in the world. A fine seam of it has been opened about 70 miles north of Auckland in the vicinity of the harbor of Wangarei, and another seam on the Kawakawa River, which empties into the Bay of Islands. The use of the diamond drill has demonstrated that several other fine seams exist besides those now being worked.

Attention was directed to the Kawakawa coal as early as 1860. It was discovered upon Maori property. After some negotiations the land was finally secured. Several unsuccessful efforts were made to develop the seams, and latterly the Bay of Islands Coal Company was formed, of which Mr. J. C. Firth, of Auckland, is chairman. This company infused new life and vigor into the mines, and the result has been that their annual output is much larger than that of any other colliery in New Zealand. The coal is hauled up by means of engine power, placed opposite the dip. The coal dips from northeast to southwest, the dip being about 1 in 4. The coal is carried by railway and barges to the loading grounds, where vessels of every size can receive their

cargoes. The Union Steamship Company and the San Francisco mail-boats are regularly supplied with this coal. It is of very superior quality—is hard and burns freely. It has been found to contain 93.20 per cent. of combustible matter, the remainder being 4.60 per cent. of water and 2.20 per cent. of ash. Its theoretical evaporative power is 7.44 pounds. Its specific gravity is about the same as that of New Castle coal. The following is the exact chemical composition of the Bay of Islands coal in 100 parts:

Fixed carbon	57.20
Hydro-carbon	36.00
Moisture	4.60
Ash	2.20
	100.00

Specific gravity from 1.287 to 1.301.

This coal has been highly commended in a report of Commodore Wiseman, of H. M. S. Curacoa, and a series of experiments were made on board the Colonial Government steamer Sturt, when it was determined that it had a superior evaporating power to the extent of 29.68 per cent. over the Australian coal, and that the consumption per actual horse-power is less by 20.7 per cent., or 14.18 per cent. less in the total consumption per hour.

KAMO COLLIERY.

Coal of fully as good quality as the Kawakawa is furnished at the Kamo Colliery, about 25 miles distant. Indeed, many are of the opinion that the Kamo workings are only the southern outcrop of the seam of Kawakawa, and that other and still more valuable seams lie underneath. Whether this opinion will prove correct or not I am unable to say, but it must be confessed that the indications are very favorable to the conclusion that there is one vast coal bed from Kamo to Kawakawa. The New Zealand Government has constructed a railway from the Kamo mines to the river emptying into the Wangarei harbor. This harbor is described as one of the best in the colony. It is perfectly safe, and of sufficient depth for the largest-sized ocean steamers.

The railway is rapidly being pushed to the harbor, and when completed, vessels will be able to load much easier than at present, as only light-draft steamers can navigate the river. The completion of the railway to the river enabled the company to more than double the annual output of the mines. The seams worked at present are 11 feet in thickness, and extend over a vast area. This colliery just now is attracting more attention than any other in New Zealand.

I learn from a recent report of Dr. Hector, the colonial geologist, that Mr. Laird, engineer of the steamer Argyle, made a trial of a ton of this coal, and found that the vessel ran 33¼ miles in four hours, and that the quantity of ashes was only ten per cent. The annual number of revolutions per minute was 132; pressure of steam, 70 pounds; vacuum, 23¼ inches. Kamo coal, when analyzed, is found to consist of the following parts: First, carbon, 56.0; hydrocarbon, 39.75; ash, 0.61; sulphur, 1.20; water, 2.44. This coal is now very generally used for blacksmiths' purposes. A trial of it was made at the workshops of Messrs. Cousins & Atkins, of Auckland, on the 27th of November, 1879. The workmen at first had little confidence in it and were unwilling to risk work of any importance to the chance heat, but after experimenting they found that the coal furnished heat equal to that which could be obtained from the best coal in the world.

The heating and welding of a valuable piece of carriage work was found to be perfect, and what surprised those who were present, and

who were skilled in such matters, was the small amount of scale which came off the heated iron.

The color of this coal is black; luster, resinous; fracture and cleavage are very irregular and granular; powder and streak, dark-brown and glistening.

SOUTH ISLAND COAL.

The coal mines in the South Island greatly outnumber those of the North Island, but many of the former are on a very small scale, being either open work or prospecting mines, but even the smallest of them are inspected by the government. The most important of the South Island mines are on the Grey and Buller Rivers. The seams are very thick and are capable of producing many hundred millions of tons of the best workable coal. These mines are only in their infancy. The first ship-load of Buller coal that reached Wellington was in 1877, but when the quality became known its tendency was to check the quantity and value of the imports of coal from Newcastle, New South Wales.

The product of the Brunner mine for 1880 was 32,505 tons; the Coal Pit Heath mine was 14,330 tons; Shag Point, 36,066; Walton Park, 19,370 tons; Kaitangata, 15,830 tons.

The Brunner mine was opened in 1873, and since that time it has produced over 200,000 tons of coal.

Quantity of coal produced in New Zealand.

The total product of all the mines of New Zealand for the year ended December 31, 1880, was 299,923 tons, against 231,218 tons for 1879. Partial returns for the year 1881 indicate that the increase will be at a still greater ratio.

The following table shows the quantity of coal *produced* in New Zealand and the quantity *imported* for each year from 1878 to 1880, inclusive:

Year.	Raised in the colony.	Imported.
	Tons.	*Tons.*
1878	162,218	174,148
1879	231,218	158,076
1880	299,923	123,298

It will be seen from the preceding table that the returns show a steady increase in the quantity of coal raised in the colony, and a corresponding steady decrease in the quantity imported.

Export of coal to San Francisco.

The average annual export of coal from New South Wales to San Francisco is between 80,000 and 90,000 tons. The cargo of the Crysomene, which sailed from Newcastle in January last, sold readily in San Francisco at $6.75 per ton. The cost of Newcastle coal at the mines is about 10 shillings ($2.44) per ton, and the freight to San Francisco is 13 shillings ($3.32) per ton, which would furnish a handsome profit to the exporter, even after allowing a large margin for wharfage and other incidental expenses.

The Bay of Islands Company now supply coal at 12 shillings per ton, and when the contract for the third section of the railway from the mines to the bay is completed, and the wharfage facilities increased, freight to San Francisco will be more easily produced, and upon much better terms than at present.

G. W. GRIFFIN, *Consul.*

UNITED STATES CONSULATE,
Auckland, N. Z., May 17, 1882.

THE LINEN TRADE OF BELFAST.

FOURTEEN STATISTICAL TABLES, PREPARED BY CONSUL WOOD, OF BELFAST.

1.—*Table showing the importations of flax, tow, and yarn into Belfast from the countries named, for the several weeks beginning with January* 5, 1882, *and ending March* 30, 1882.

Dates.	England.			Scotland.			Holland.			Russia.		
	Flax.	Tow.	Yarn.	Flax.	Tow.	Yarn.	Flax.	Tow.	Yarn.	Flax.	Tow.	Yarn.
Week ending—	*Tons.*	*Tons.*	*Bales*	*Tons.*	*Tons.*	*Bales*	*Tons.*	*Tons.*	*Bales.*	*Tons.*	*Tons.*	*Bales*
Jan. 5	258	3	140	36	35	67	.....	.....	.....	29	.....	.....
12	210	7	116	59	63	13	39	1	.....	.....	.....	.....
19	213	4	77	38	7	2	35	2	.....	.....	.....	.....
26	247	13	166	41	25	6	21	1	.....	.....	.....	.....
Feb. 2	188	15	110	81	31	4	78	.....	.....	.....	.....	.....
9	266	4	83	48	35	8	50	.....	.....	.....	.....	.....
16	333	9	112	57	11	3	83	.....	1	.....	.....	.....
23	311	4	95	63	9	11	46	.....	.....	.....	.....	.....
Mar. 2	274	3	97	55	27	15	90	.....	.....	.....	.....	.....
9	255	1	117	104	57	3	.....	.....	.....	.....	.....	.....
16	300	6	125	56	31	9	128	.....	.....	.....	.....	.....
23	318	29	79	28	24	2	90	4	.....	.....	.....	.....
30	417	7	126	33	27	1	94	.....	.....	.....	.....	.....
Total	3,585	105	1,383	699	382	144	754	8	1	29	.....	.....

TOTALS FOR THIRTEEN WEEKS.

Years.	Flax.	Tow.	Yarn.
	Tons.	*Tons.*	*Bales.*
1882	5,181	511	1,530
1881	3,093	419	1,254
1880	6,481	370	4,372

2.—*Table showing the importation of flaxseed into the port of Belfast for the several weeks named, beginning with December* 29, 1881, *and ending with March* 23, 1882.

	Russian.	Dutch.	English.
1881.	*Barrels.*	*Hhds. & bbls.*	*Sacks.*
Week ending December 29	2,485	.....	.....
1882.			
Week ending—			
Jan. 5	.....	230	.....
12	.....	297	.....
19	.....	665	.....
26	.....	1,037	.....
Feb. 2	.....	980	40
9	.....	42	.....
16	.....	384	136
23	2,650	492	.....
Mar. 2	.....	565	.....
9	.....	283	.....
16	.....	390	.....
23	.....	605	40
Total	5,135	6,410	216

3.—*Table showing the importations of flax and tow into the United Kingdom.*

[Flax, dressed and undressed, and tow or codilla of flax.]

Countries.	Month ending February 28.					
	Quantities.			Value of imports.		
	1880.	1881.	1882.	1880.	1881.	1882.
From—	*Cwts.*	*Cwts.*	*Cwts.*			
Russia	59, 521	.....	26, 708	£110, 434	.....	£40, 443
Germany	16, 229	99	861	29, 424	£194	1, 611
Holland	10, 492	10, 326	15, 167	33, 571	32, 440	47, 786
Belgium	30, 249	27, 753	29, 878	101, 620	102, 440	110, 432
Other countries	5, 812	2, 088	8, 680	20, 202	8, 655	17, 215
Total	122, 303	40, 266	81, 294	295, 251	143, 729	217, 487
In dollars	.....	.....	.....	$1, 434, 919 86	$698, 522 94	$1, 056, 986 82

Countries.	Two months ending February 28.					
	Quantities.			Value of imports.		
	1880.	1881.	1882.	1880.	1881.	1882.
From—	*Cwts.*	*Cwts.*	*Cwts.*			
Russia	210, 183	13, 373	85, 858	£412, 342	£23, 548	£136, 153
Germany	26, 871	2, 763	9, 758	49, 859	5, 468	17, 690
Holland	25, 175	18, 519	27, 851	81, 916	61, 241	88, 875
Belgium	71, 462	43, 893	59, 055	246, 305	156, 706	221, 616
Other countries	12, 925	3, 323	12, 988	40, 838	11, 870	27, 571
Total	346, 616	81, 871	195, 510	831, 261	258, 833	491, 905
In dollars	.....	.....	.....	$4, 039, 904 46	$1, 257, 928 38	$2, 390, 658 30

4.—*Table showing the imports of tow and flax into the United Kingdom for the four month ending with March*, 1882.

Countries.	December, 1881.	January, 1882.	February, 1882.	March, 1882.
From—	*Tons.*	*Tons.*	*Tons.*	*Tons.*
Holland	890	634	758	937
Belgium	1, 713	1, 459	1, 494	1, 667
Germany	123	445	44	221
Russia	2, 561	2, 958	1, 335	1, 030
Other countries	198	215	434	243
Total	5, 485	5, 711	4, 065	4, 098
Value	£267, 200	£274, 418	£217, 487	£226, 462
In dollars	1, 300, 328 80	1, 335, 455 20	1, 058, 400 49	1, 102, 077 30

5.—*Table showing the exportations from Belfast of flax, tow, linen, and thread to the countries named for the several weeks beginning with January* 5, 1882, *and ending with March* 30, 1882.

Dates.	England.				
	Flax.	Tow.	Yarn.	Linen.	Thread.
Week ending—	*Tons.*	*Tons.*	*Bales.*	*Boxes.*	*Packages.*
Jan. 5	55	13	192	1,910	70
12	18	5	176	2,157	112
19	13	1	210	2,586	75
26	30	11	231	2,465	109
Feb. 2	24	10	220	2,559	100
9	41	15	237	2,679	100
16	33	11	229	2,502	105
23	21	24	217	2,404	103
Mar. 2	27	9	213	2,622	91
9	49	17	210	2,831	98
16	97	6	243	2,337	91
23	20	11	248	2,747	116
30	73	16	217	2,447	81
Total	501	149	2,843	32,246	1,251

Dates.	Scotland.				
	Flax.	Tow.	Yarn.	Linen.	Thread.
Week ending—	*Tons.*	*Tons.*	*Bales.*	*Boxes.*	*Packages.*
Jan. 5	60	.....	96	316	18
12	83	1	52	212	8
19	75	2	99	323	5
26	95	2	93	312	23
Feb. 2	130	19	78	331	11
9	114	4	90	299	8
16	95	5	106	407	33
23	97	3	65	389	19
Mar. 2	72	4	89	352	23
9	109	1	93	310	22
16	76	.....	70	391	18
23	51	.....	84	335	45
30	88	.....	89	323	28
Total	1,145	41	1,104	4,300	261

Dates.	New York via Larne.				
	Flax.	Tow.	Yarn.	Linen.	Thread.
Week ending—	*Tons.*	*Tons.*	*Bales.*	*Boxes.*	*Packages.*
Jan. 5	12½	6	12	166	3
12	(*)	(*)	(*)	(*)	(*)
19	.....	.....	.....	.....	.....
26	.....	.....	.....	.....	.....
Feb. 2	81½	111	.....	737	81
9	.....	.....	.....	.....	.....
16	22	14	24	197	19
23	4	.....	15	129	30
Mar. 2	.....	.....	.....	.....	.....
9	3	.....	5	.....	.....
16	9½	10	14	190	15
23	.....	4	.....	92	6
30	.....	.....	12	114	9
Total	132½	145	82	1,625	163

* Returns not given.

6.—*Table showing the exports of linen from Belfast to the United States and other countries during the month of January*, 1881, *as compared with January*, 1882.

	January, 1881.	January, 1882.	Increase or decrease.
	Yards.	*Yards.*	*Yards.*
Exports to United States	10, 200, 500	12, 146, 700	1, 946, 200, inc.
Exports to other countries	7, 358, 700	6, 601, 700	757, 000, dec.
Total exports	17, 559, 200	18, 748, 400	1, 189, 200, inc.

7.—*Table showing the exports of linen manufactures and linen yarns for the United Kingdom for the month ending Jannary* 31, 1832, *compared with* 1880 *and* 1881.

1. LINEN YARNS.

Countries.	Quantities.			Declared value.		
	1880.	1881.	1882.	1880.	1881.	1882.
	Pounds.	*Pounds.*	*Pounds.*			
To Germany	90, 400	170, 500	143, 900	£ 9, 010	£14, 970	£14, 122
Holland	199, 100	166, 400	212, 700	9, 734	7. 166	9, 057
Belgium	51, 800	66, 500	123, 700	5, 193	4, 503	11, 130
France	84, 100	63, 900	143, 600	11, 361	7, 954	17, 497
Spain and colonies	600, 100	561, 300	680, 100	25, 704	23, 988	27, 074
Italy	77, 800	89, 600	107, 200	4, 620	5, 038	5, 765
Other countries	97, 000	142, 200	375, 000	4, 797	5, 379	12, 667
Total	1, 200, 300	1, 260, 400	1, 786, 200	70, 419	68, 998	97, 312

2. LINEN MANUFACTURES.

	Yards.	*Yards.*	*Yards.*			
To Russia	66, 100	45, 100	43, 200	£3, 321	£2, 095	£2, 346
Germany	375, 500	391, 100	367, 200	13, 717	16, 882	16, 883
Holland	22, 400	17, 500	27, 200	1, 081	760	1, 332
France	328, 100	309, 700	299, 400	17, 336	16, 098	13, 199
Portugal and colonies	111, 000	105, 200	121, 400	2, 314	2, 163	2, 891
Spain and colonies	202, 500	231, 300	220, 300	7, 890	8, 972	9, 123
British North America	1, 263, 000	772, 600	652, 700	26, 082	18, 432	16, 494
Australia	638, 700	907, 700	1, 406, 900	2, 026	28, 288	40, 977
United States	14, 941, 500	10, 200, 500	12, 146, 700	417, 765	299, 909	335, 200
Other countries	2, 271, 200	4, 012, 200	2, 696, 200	78, 703	104, 397	69, 345
Total of plain bleached or unbleached	20, 220, 000	16, 952, 900	17, 891, 200	570, 265	197, 996	507, 790
Total of checked, printed, and dyed damask, or diapers	595, 100	346, 800	489, 900	17, 583	9, 169	16, 174
Total of piece-goods	255, 700	259, 500	277, 300	11, 830	12, 625	13, 571
Sail-cloth	21, 071, 800	17, 559, 200	18, 748, 400	599, 678	519, 817	537, 535
Thread for sewing lbs.	256, 732	198, 500	321, 700	31, 724	26, 049	36, 344
Unenumerated				33, 245	22, 893	38, 843
Total value of linen manufactures				664, 747	568, 759	612. 722
In dollars				$323, 731, 789	$276, 835, 633	$298, 395, 614

8.—*Table showing the exports of linen yarns from the United Kingdom for the four months ending with March, 1882.*

Countries.	December, 1881.	January, 1882.	February, 1882.	March, 1882.
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*
To Spain and Canaries	555,000	680,100	661,000	766,100
Holland	245,200	212,700	143,200	232,600
Germany	229,600	143,900	207,400	201,500
Italy	108,600	107,200	69,600	79,300
France	147,500	143,600	158,100	176,400
Belgium	96,800	123,700	155,500	205,700
other countries	368,000	375,000	279,400	250,600
Total quantity	1,750,700	1,786,200	1,674,200	1,912,200
Value	£98,484	£97,313	£91,189	£106,232
In dollars	$479,272 39	$473,573 72	$443,771 27	$516,978 03

Totals for three months.

Date.	Pounds.	Value.	In dollars.
For three months ending March 31, 1881	4,230,000	£245,608	$1,195,251 33
For three months ending March 31, 1882	5,372,600	294,733	1,434,318 14

9.—*Table showing the exports of piece linens of all descriptions (except sail cloth and unenumerated) from the United Kingdom to the under-mentioned countries for the years* 1880 *and* 1881, *showing the increase and decrease in quantity and value.*

Countries.	Quantities, 1880.	Quantities, 1881.	Increase or decrease.	Per cent.	Values, 1880.	Values, 1881.	Increase or decrease.	Per cent.
	Yards.	*Yards.*	*Yards.*					
Peru	114,900	362,300	247,400 inc.	215.3	£3,890	£9,714	£5,824 inc.	149.7
Spanish West Indies	7,415,900	19,038,500	11,622,600 inc.	156.7	213,915	447,653	233,740 inc.	109.3
Danish West Indies	454,600	816,900	362,300 inc.	79.7	13,376	19,946	6,570 inc.	49.1
Argentine Republic	1,049,400	1,557,900	508,500 inc.	48.5	39,072	55,220	16,148 inc.	41.3
Italy	2,161,300	2,838,700	677,400 inc.	31.3	87,226	111,858	24,632 inc.	28.2
Australia	10,424,500	13,526,200	3,101,700 inc.	29.8	325,087	404,917	79,830 inc.	24.6
Other countries	13,026,800	16,270,200	3,045,400 inc.	23.4	393,432	468,383	74,951 inc.	19.1
Holland	250,500	298,800	48,300 inc.	19.3	9,750	11,241	1,491 inc.	15.3
British India	1,870,400	2,206,900	336,500 inc.	18.0	63,449	69,354	5,905 inc.	9.3
Germany	4,288,600	4,980,900	692,300 inc.	16.1	174,389	209,223	34,843 inc.	20.0
United States of Colombia	2,820,200	3,243,100	422,900 inc.	15.0	62,209	73,552	11,343 inc.	18.2
Brazil	3,470,500	3,723,400	252,900 inc.	7.3	123,031	136,157	13,126 inc.	10.7
Spain and Canaries	2,596,500	2,639,400	42,900 inc.	1.7	110,170	110,150	20 dec.	0.0
Chili	991,600	950,100	41,500 dec.	4.2	29,057	30,103	1,046 inc.	3.6
United States of America	90,621,600	82,050,900	8,570,700 dec.	9.5	2,734,210	2,344,910	389,300 dec.	14.2
British West Indies and Guiana	2,573,800	2,252,200	321,600 dec.	12.5	62,583	48,655	13,928 dec.	22.3
France	3,881,200	3,318,000	563,200 dec.	14.5	168,236	173,924	5,688 inc.	3.4
British North America	7,656,700	6,281,000	1,375,100 dec.	18.0	185,379	155,237	30,142 dec.	16.3
Portugal, Azores, and Madeira	1,493,600	1,181,700	311,900 dec.	20.9	34,788	27,917	6,871 dec.	19.8
Russia	1,103,400	868,400	235,000 dec.	21.3	60,094	41,284	18,810 dec.	31.3
Hayti	3,411,200	2,337,200	1,074,000 dec.	31.5	75,682	48,299	27,383 dec.	26.2
Total	161,677,200	170,545,300	8,868,100 inc.	5.5	4,969,023	4,997,697	28,674 inc.	0.6
In dollars					$24,149,451 78	$24,288,807 42		

10.—*Table showing the exports of linen and linen yarns from the United Kingdom for the month ending December* 31, 1881, *and for the year ending December* 31, 1881, *compared with the corresponding periods of the years* 1879 *and* 1880.

LINEN YARNS.

Whither.	Month ending December 31.						Year ending December 31.					
	Quantities.			Declared value.			Quantities.			Declared value.		
	1879.	1880.	1881.	1879.	1880.	1881.	1879.	1880.	1881.	1879.	1880.	1881.
	Pounds.	*Pounds.*	*Pounds.*				*Pounds.*	*Pounds.*	*Pounds.*			
To Germany	247, 500	201, 200	229, 600	£23, 329	£17, 300	£18, 801	3, 171, 600	2, 130, 600	2, 476, 500	£260, 840	£203, 001	£209, 185
Holland	391, 200	167, 200	245, 200	16, 827	7, 957	10, 720	3, 518, 100	2, 520, 300	2, 438, 100	160, 910	120, 215	102, 364
Belgium	89, 700	130, 000	96, 800	10, 488	11, 046	9, 171	1, 167. 100	1, 140, 000	1, 629, 500	116 080	107, 394	125, 619
France	47, 400	95, 500	147, 500	6, 832	12, 008	14, 438	1, 205, 400	947, 100	1, 527, 200	138, 700	122, 167	182, 164
Spain and Canaries	496, 000	616, 100	555, 000	20, 758	26, 824	23, 284	5, 964, 400	6, 839, 200	6, 552, 600	282, 284	291, 431	280, 212
Italy	69, 300	89, 600	108, 600	3, 888	5, 431	5, 644	855, 300	823, 900	936, 700	49, 770	47, 776	51, 904
Other countries	131, 400	98, 500	368, 000	6, 353	5, 633	13, 426	1, 546, 900	2, 076, 400	2, 724, 900	67, 383	88, 334	105, 744

LINEN MANUFACTURES.

PIECE GOODS OF ALL KINDS.												
	Yards.	*Yards.*	*Yards.*				*Yards.*	*Yards.*	*Yards.*			
To Russia	207, 600	201, 600	156, 600	£9, 522	£9, 435	£7, 460	1, 416, 700	1, 103, 400	868, 400	£72, 017	£60, 094	£41, 284
Germany	1, 084, 300	319, 600	423, 000	51, 531	13, 841	1, 763	6, 016, 400	4, 288, 600	4, 980, 900	262, 350	174, 389	209, 223
Holland	46, 500	11, 100	32, 300	1, 529	453	1, 153	312, 300	250, 500	298, 800	10, 870	9, 750	11, 241
France	390, 000	298, 200	313, 300	18, 854	11, 206	18, 085	4, 646, 100	3, 881, 200	3, 318, 800	228, 910	168, 236	173, 924
Portugal, Azores, & Maderia	65, 300	122, 300	125, 100	1, 213	2, 540	2, 272	1, 210, 700	1, 493, 600	1, 181, 700	27, 915	34, 788	27, 917
Spain and Canaries	180, 800	161, 100	184, 700	6, 757	6, 918	7, 601	2, 581, 200	2, 596, 500	2, 639, 400	100, 218	110, 170	110, 150
United States	9, 351, 800	6, 237, 100	6, 090, 500	259, 808	172, 119	163, 233	85, 561, 400	90, 621, 600	82, 050, 900	2, 338, 910	2, 734, 210	2, 344, 910
British North America	138, 100	89, 700	72, 800	4, 071	2, 872	2, 615	4, 932, 900	7, 656, 700	6, 281, 600	108, 410	185, 279	155, 237
Australia	882, 200	1, 227, 800	2, 102, 200	27, 098	36, 095	58, 911	9, 508, 100	10, 424. 500	13, 526, 200	277, 195	325, 087	404, 917
Other countries	2, 065, 100	2, 932, 000	3, 701 400	59, 209	83, 344	112, 333	33, 475, 200	34, 373, 000	49, 898, 800	987, 507	1, 016, 738	1, 357, 779
Total of plain, bleached and unbleached	14, 411, 700	11, 600, 500	13, 201, 900	439, 592	338, 823	315, 408	149, 661, 000	156, 689, 600	165, 045, 500	4, 414, 362	4, 818, 841	4, 836, 582
Total of checked, printed, dyed, damasks, or diapers	432, 100	445, 400	542, 300	13, 267	12, 101	16, 637	6, 559, 700	4, 987, 600	5, 499, 800	200, 396	150, 182	161, 115
Total of piece goods	14, 843, 800	12, 045, 900	13, 744, 200	452, 859	350, 924	392, 045	156, 220, 700	161, 677, 200	170, 545, 300	4, 614, 698	4, 969, 023	4, 997, 697

Sailcloth and sails	415, 900	12, 045, 900	13, 744, 200	19, 190	14, 185	15, 601	4, 089, 900	3, 289 400	3, 308, 000	199, 274	166, 477	165, 972
Thread for sewing lbs.	198, 504	193, 700	219, 200	25, 717	22, 657	28, 482	2, 829, 000	2, 878, 400	2, 587, 100	350, 245	372, 078	329, 934
Unenumerated				28, 405	28, 201	39, 176				358, 940	326, 441	350, 326
Total value of linen manufactures				526, 171	415, 967	475, 304				5, 473, 127		5, 843, 929
In dollars				$2, 557, 191 06	$2, 021, 599 62	$2, 309, 977 44				$26, 598, 397 22		$28, 401, 494 94

11.—*Table showing the exports of linen and linen yarns from the United Kingdom, for the month ending February* 28, 1882, *and for the two months ending February* 28, 1882, *compared with the corresponding periods of the years* 1880 *and* 1881.

LINEN YARNS.

Whither.	Month ending February 28.						Two months ending February 28.					
	Quantities.			Declared value.			Quantities.			Declared value.		
	1880.	1881.	1882.	1880.	1881.	1882.	1880.	1881.	1882.	1880.	1881.	1882.
	Pounds.	*Pounds.*	*Pounds.*				*Pounds.*	*Pounds.*	*Pounds.*			
To Germany	96, 800	107, 000	207, 400	£8, 781	£16, 518	£18, 181	187, 200	357, 500	351, 300	£17, 791	£31, 488	£32, 303
Holland	230, 600	107, 800	143, 200	10, 935	4, 533	5, 702	429, 700	274, 200	355, 900	20, 669	11, 699	14, 759
Belgium	42, 300	172, 300	155, 500	4, 406	13, 703	11, 638	94, 100	238, 800	279, 200	9, 599	18, 206	22, 768
France	61, 700	152, 400	158, 100	8. 010	15, 703	17, 962	145, 800	216, 300	301, 700	19, 371	23, 657	35, 459
Spain and Canaries	439, 500	458. 000	661, 000	19, 571	18, 972	24, 577	1, 039, 600	1, 019, 300	1, 341, 100	45, 275	42, 960	51, 651
Italy	54, 400	66, 500	69. 600	3, 130	3, 844	3, 540	132, 200	156, 100	176, 800	7, 750	8, 882	9, 305
Other countries	254, 600	179, 300	279, 400	10, 890	6, 143	9, 589	351, 600	321, 500	654, 400	15, 606	11, 522	22, 256
	1, 179, 900	1, 323, 300	1, 674, 200	65, 642	79, 416	91, 189	2, 380, 200	2, 583, 700	3, 460, 400	136, 061	148, 414	188, 501

LINEN MANUFACTURES.

PIECE GOODS OF ALL KINDS.												
	Yards.	*Yards.*	*Yards.*				*Yards.*	*Yards.*	*Yards.*			
To Russia	74, 800	6, 200	42, 000	£3, 586	£299	£1, 705	140, 900	51, 300	85, 200	£6, 907	£2, 394	£4, 051
Germany	227, 900	358, 900	315, 800	11, 026	16, 251	13, 778	603, 400	750, 000	683, 000	24, 741	33, 133	30, 611
Holland	21, 500	27, 900	20, 500	888	1, 085	1, 173	43, 900	45, 400	47, 700	1, 969	1, 845	2, 505
France	405, 800	355, 200	427, 600	18, 786	17, 980	20, 677	733, 900	664, 900	727, 000	36, 122	34, 078	33, 876
Portugal, Azores, & Madeira	104, 200	104, 500	139, 900	2, 086	2, 504	2, 845	215, 200	209, 700	261, 300	4, 400	4, 667	5, 736
Spain and Canaries	247, 300	210, 200	193, 700	9, 884	8, 512	8, 384	449, 800	441, 500	414, 000	17, 774	17, 484	17, 507
United States	11, 565, 000	8, 882, 600	9, 965, 300	335, 644	258, 084	252, 674	26, 506, 500	19, 083, 100	22, 112 000	753, 409	557, 993	587, 874
British North America	913, 100	753, 400	550, 000	24. 923	18, 898	15. 470	2, 176, 100	1, 526, 000	1, 202, 700	51, 005	37, 330	31, 964
Australia	417, 100	692, 500	986, 500	13, 515	25, 272	26, 307	1, 055, 800	1, 600, 200	2, 393, 400	33, 541	53, 560	67, 284
Other countries	2, 161, 900	3, 841, 100	3, 037, 100	59, 703	101, 797	74, 872	4, 433, 100	7, 813, 300	5, 733, 800	120, 436	206, 194	144, 267
Total of plain, bleached and unbleached	16, 138, 600	15, 232, 500	15, 678, 400	480, 039	450, 682	417, 885	36, 358, 600	32, 185, 400	33, 159, 600	1, 050, 304	948, 678	925, 675
Total of checked, printed, dyed damasks, or diapers	484, 100	453, 500	493, 000	13, 664	14, 028	16, 362	1, 080, 200	800, 300	982, 900	31, 247	23, 224	32, 536
Total of piece goods	16, 828, 300	15, 843, 700	16, 443, 200	504, 781	473, 431	448, 661	37, 900, 100	33, 402, 900	35, 191, 600	1, 104, 459	993, 248	985, 996

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12.—*Table showing the exports of linen piece goods from the United Kingdom for the four months ending with March*, 1882.

Countries.	December, 1881.	January, 1882.	February, 1882.	March, 1882.
	Yards.	*Yards.*	*Yards.*	*Yards.*
To Brazil	399, 400	442, 400	345, 200	228, 600
Australia	2,102, 200	1, 406, 900	986, 500	965, 000
Spanish West Indies	1, 272, 900	946, 800	1, 047, 200	1, 111, 600
British India	237, 300	193, 300	190, 700	246, 600
Germany	423, 000	367, 200	315, 800	467, 100
British West Indies	188, 700	249, 400	393, 300	223, 600
Spain and Canaries	184, 700	220, 300	193, 700	317, 000
France	313, 300	299, 400	427, 600	709, 900
United States of America	6, 090, 500	12, 146, 700	9, 965, 300	10, 413, 500
Italy	190, 200	171, 200	128, 300	316, 500
British North America	72, 800	652, 400	550, 000	712, 600
United States of Colombia	161, 700	147, 000	127, 500	101, 500
Other countries	2, 107, 500	1, 505, 400	1, 771, 500	1, 960, 900
Total quantity	13, 744, 200	18, 748, 400	16, 443, 200	17, 855, 400
Value	£392, 045	£537, 535	£448, 461	£529, 107
In dollars	$3, 109, 256 15	$2, 615, 914 08	$2, 182, 435 46	$2, 574, 899 22

	Yards.	Value.	In dollars.
For three months ending March 31, 1881	49, 724, 300	£1, 463, 964	$6, 129, 504 68
For three months ending March 31, 1882	53, 047, 000	1, 515, 103	7, 378, 551 61

13.—*Table showing the declared value of the exports of the following primary articles of British and Irish produce and manufactures from the United Kingdom for the three months ending 31st March*, 1882, *compared with the relative period in* 1881.

Articles.	Three months ending March 31, 1881.	Three months ending March 31, 1882.	Increase or decrease.	Per cent.
Iron and steel	£5, 385, 887	£7, 430, 048	£2, 044, 161 Inc.	38. 0
Apparel and slops	786, 446	1, 068, 540	282, 094 Inc.	35. 9
Silk manufactures	608, 016	752, 498	144, 482 Inc.	23. 8
Haberdashery, &c	993, 925	1, 175, 836	181, 911 Inc.	18. 3
Hardware and cutlery	850, 574	1, 005, 381	154, 807 Inc.	18. 2
Glass	215, 250	251, 476	36, 226 Inc.	16. 8
Woolen manufactures	4, 750, 666	5, 478, 800	728, 134 Inc.	15. 3
Paper and stationery	441, 174	506, 944	65, 770 Inc.	14. 9
Linen manufactures	1, 617, 310	1, 726, 838	109, 528 Inc.	6. 8
Beer and ale	464, 545	491, 452	26, 907 Inc.	5. 8
Alkalies	423, 106	436, 584	13, 478 Inc.	3. 2
Jute manufactures	536, 308	548, 848	12, 540 Inc.	2. 3
Earthernware and chinaware	482, 655	475, 563	7, 092 Dec.	1. 5
Cotton manufactures	16, 721, 984	15, 932, 101	789, 883 Dec.	4. 7
Total	34, 277, 846	37, 280, 909		
In dollars	$166, 790, 331 56	$181, 185, 217 74		

14.—*Table showing the declared value of the exports of the following primary articles of British and Irish produce and manufactures from the United Kingdom in the year* 1881 *compared with* 1880.

Articles.	1880.	1881.	Increase or decrease.	Per cent.
Silk manufactures	£2, 030, 659	£2, 564, 673	£534, 014 Inc.	26. 3
Apparel and slops	3, 212, 103	3, 710, 475	489, 372 Inc.	15. 5
Steam engines	2, 786, 449	3, 186, 550	400, 101 Inc.	14. 4
Paper and stationery	1, 830, 768	2, 042, 484	211, 716 Inc.	11. 6
Cotton yarn	11, 901, 623	13, 167, 276	1, 265, 653 Inc.	10. 6
Hardware and cutlery	3, 520, 878	3, 859, 340	338, 462 Inc.	9. 6
Haberdashery, &c	3, 874, 722	4, 190, 177	315, 455 Inc.	8. 1
Linen yarn	978, 318	1, 057, 172	78, 854 Inc.	8. 1
Earthernware and chinaware	1, 978, 445	2, 104, 298	125, 853 Inc.	6. 4

14.—*Table showing the declared value of the exports of the following primary articles of British and Irish produce, &c.*—Continued.

Articles.	1880.	1881.	Increase or decrease.	Per cent.
Jute manufactures	£2, 255, 508	£2, 370, 088	£114, 580 Inc.	5. 1
Coal, coke, &c	8, 372, 933	8, 793, 960	421, 027 Inc.	5. 0
Woolen and woolen manufactures	17, 265, 177	18, 122, 189	857, 012 Inc.	4. 9
Machinery	6, 477, 067	6, 757, 063	279, 996 Inc.	4. 3
Cotton manufactures	63, 662, 433	65, 922, 651	2, 260, 218 Inc.	3. 6
Glass	921, 508	954, 404	32, 896 Inc.	3. 6
Jute yarn	233, 224	236, 620	3, 396 Inc.	1. 5
Linen manufactures	5, 836, 019	5, 843, 929	7, 910 Inc.	0. 1
Beer and ale	1, 733, 505	1, 724, 846	8, 659 Dec.	0. 5
Iron and steel	28, 390, 316	27, 575, 802	814, 514 Dec	2. 9
Alkali and chemicals	4, 782, 103	4, 629, 792	152, 311 Dec.	3. 2
Woolen and worsted-yarn	3, 344, 740	3, 224, 368	120, 372 Dec.	3. 6
Total	175, 388, 493	182, 038, 152		
In dollars	$1, 252, 388, 075 98	$884, 705, 418 72		

A. B. WOOD,
Consul.

UNITED STATES CONSULATE,
Belfast, May 22, 1882.

GERMANY'S SURPLUS POPULATION.

REPORT BY CONSUL SCHOENLE, OF BARMEN.

The increase of the population in Germany has been so great during the last decades that the Walthusian theory of our population and its attendant effects have been almost universally accepted by German economists and statisticians. Figures show that the population in Prussia has increased during the years of 1816 to 1864 from 10,350,000 to 19,260,000. Up to 1875, inclusive, the population of the old Prussian provinces had increased to 21,230,000, that is, 105 per cent. in sixty years.

From 1875 to 1880 the increase of population in all the German states is computed at about 525,000 per annum. As the increase of population is in geometric ratio, the German population, which, according to the census taken on the 1st of December, 1880, was 45,250,000, would double within the next fifty years.

At the present rate of increase the German population will reach 60,000,000 in the year 1900, and in the year 1925 it will probably attain 80,000,000.

Comparing the census returns in Germany with those of France the contrast is startling. The population of France shows an increase of only 389,000 during the period of five years. This excessively small increase occurred principally in large cities, and was caused, for the most part, by foreign influx, while the German population has increased over 2,000,000 during the same period. At the rate at which French population is now growing, it would not double before 433 years had elapsed; in other words, it is almost stationary. A statistical table lately drawn up shows the birth-rate in Germany to be 3.91 per hundred of population, while in France it is only 2.47. The net excess of births in Germany over the deaths amounted to 522,970 for the year of 1881. And

it is to be observed that German population does not, so far, show any tendency to diminish.

In the poor and densely populated districts the increase exceeds the average for the whole of Germany. For instance, while the increase of population throughout Germany during the years 1867 to 1871 averaged a little over 1⅛ per cent, the increase in Upper Silesia, where, according to frequent declarations of the Prussian Government, a failure of the potato or cabbage crops brings the 100,000 inhabitants of this province to the verge of starvation, was 22 per cent. during the above-named period. This constant increase of population in Germany naturally produces a corresponding increase of labor supply. Consequently wages and business profits decline in proportion, so that by this time the German population is closely pressed for the means of subsistence.

The natural increase of population has almost exceeded the natural means of its subsistence, and this will continue unless the excessive growth receives a check or be diverged.

In the face of these facts a large and steady efflux of inhabitants from Germany is an economic necessity, and such outflow is regarded by many German sociologists as a blessing in disguise. This emigration *en masse* entails, however, a vast pecuniary loss on Germany. Close calculations of German economists have exhibited some astounding figures in this direction. For instance, Dr. Friedrich Kappe, for a number of years a citizen of the United States, and a noted writer on emigration subjects, estimates the capital in money and valuables taken away from Germany by each emigrant, at not less than 450 marks, or $108. The number of German emigrants landed in the different ports of the United States during the year 1881, was 248,323.

Taking the above figures as a basis, Germany has lost directly on capital transferred to the United States the sum of 111,745,350 marks, or $25,818,884 during said year.

Dr. Engel, the chief of the Prussian bureau of statistics, and Dr. Fabri, an eminent authority on social science, calculate the average cost of bringing up a person of the lower and middle classes to the fifteenth year at not less than 2,000 marks, or $476. Germany has sent forth over 3,500,000 emigrants during the last sixty years, and of this number the greater part went during the last thirty years. The loss to Germany in feeding, sheltering, clothing, and educating this number of emigrants has been nearly seven milliards of marks. Adding the loss Germany has sustained in cash and valuables taken away by each emigrant, the total loss to Germany through emigration during the last sixty years may be set down as over nine milliards of marks, nearly twice the amount paid by France to Germany as war indemnity in 1871.

It is well known, and has frequently been expressed in legislative halls and by the press, that the enormous emigration from Germany to the United States does not bring her any corresponding reflux; on the contrary, the German laborers and operatives in the United States are fast becoming Germany's competitors in agricultural and industrial pursuits, and this state of affairs has induced the thinking men of Germany to attempt the inauguration of a colonial policy.

The motives underlying the present colonization movement in Germany, may be summed up as follows:

1st. An economic one. It is calculated that the vast loss of capital and capital-creating force in an average emigrant could be retrieved to a certain extent by colonization. The foundation of colonies would create new markets for German manufactures, enlarge the German export list, revive and ease business, and increase the circulating medium in the home country.

2d. An ethnological one. The Anglo-Saxon element is rapidly increasing and spreading over the whole world. There are already 93,000,000 of English speaking persons of the Caucasian race, apart from the numerous uncivilized and half-civilized tribes in fealty to the British Crown. Thus the fear is well founded that the German element—for German emigrants to foreign countries become denationalized in a short time—will decline in importance, and the German language and literature no longer play an important part, as the former would be spoken by only a comparatively small portion of the civilized world. Expansion of German domain, and especially transatlantic development of the German element is, therefore, indispensable, if the threatened preponderance of Anglo-Saxonism is to be checked and ultimately prevented. The idea of German opposition to Anglo-Saxonism is fast gaining ground in the minds of the German social scientists.

3d. An ideal one. With a lively economic intercourse between the colonies and the mother country, an exchange of goods of an ideal character would go hand in hand. Many obsolete customs and narrow views of the people in the old country would yield to wider and more exalted views; the close communication with a transoceanic kindred people, the intelligence of things and matters outside of Europe, and the enhancement of German enterprise would elevate the modes of living and thinking, and would altogether improve the national character of the Germans.

4th. A political one. If Germany be unable to develop new markets for her trade and commerce, and relieve herself of the burden of her accumulated products, the already strained taxing power would sooner or later yield. She could not keep up the strength of her army and navy, and consequently could not maintain her historic rank amongst the family of nations, because her inevitable impoverishment must effectually cripple her power against the continually increasing prosperity of her sister nations. In this connection another essential point may be noted. Germany needs, above all, an outlet for the large socialistic and communistic element, which constitutes a standing threat to her institutions; colonization is considered one of the best safety-valves for this class of people. Thus emigration and colonization are the natural outlets for overpopulated Germany, and while the former is at present regarded as an economic necessity, the latter is held out as an economic problem. The different existing organizations for colonization purposes are all private enterprises and have but little capital at their disposal, consequently they don't appear to make much headway.

Under these circumstances the establishment of German colonies may remain a pious wish for a long time to come, and may, perhaps, never be realized.

WOLFGANG SCHOENLE, *Consul.*

UNITED STATES CONSULATE,
Barmen, June 14, 1882.

AUSTRALASIAN STATISTICS.

REPORT BY CONSUL GRIFFIN, OF AUCKLAND, NEW ZEALAND.

It should be a great source of pride to the people of this colony that the last census returns show a larger increase of population in New Zealand than in any other of the Australasian colonies.

The census was taken throughout Her Britannic Majesty's dominions on the 3d of April, 1881. The method of taking it, as far as New Zealand is concerned, was simply admirable.

The complete returns have not yet been published, but I have had placed at my disposal from official sources the following interesting facts.

The total tax-paying population of the colony of New Zealand at the date of the census was found to be 533,801. Of this number there were 44,099 of the native or Maori race, 1,899 half-castes, not living as members of a Maori tribe, and 4,941 Chinese.

The following table has been forwarded to me by the registrar-general of the several provincial districts:

CENSUS OF NEW ZEALAND.

Provincial districts.	Total.	Males.	Females.
Auckland	99, 216	54, 020	45, 196
Paranaki	14, 852	8, 528	6, 324
Wellington	61, 354	32, 764	23, 590
Hawkes Bay	17, 354	9, 692	7, 662
Marlborough	9, 304	5, 257	4, 047
Nelson	26, 297	14, 935	11, 362
Westland	14, 782	8, 966	5, 816
Canterbury	112, 115	60, 579	51, 536
Otago	134, 186	74, 549	59, 637
Chatham Islands	242	162	80
Total population exclusive of—			
Maoris	489, 702	269, 452	220, 250
Aboriginal natives	44, 099	24, 370	19, 729
Total population of New Zealand	533, 801	293, 822	239, 979

It will be seen from this table that in every province the number of males is largely in excess of the females. In the European population alone there is a disparity of nearly 50,000, the exact number being 49,202. I do not think any of the other Australasian colonies exhibit a like disproportion. For instance, in the colony of Victoria there are 450,287 males, and 408,296 females, a discrepancy of only 41,990 amongst a much larger population. It is also singular that a marked discrepancy exists in the proportion of the Maori males and females.

Among the Maoris there is a deficiency of 19,729 females, so that the total deficiency of females in the colony of New Zealand is 68,931.

The following is a list of the municipalities in the colony with a population of 3,000 and upwards:

District.	Total.	Males.	Females.
Dunedin	24, 377	12, 248	12, 129
Wellington	20, 535	10, 224	10, 311
Auckland	16, 597	8, 623	7, 973
Christchurch	15, 214	7, 742	7, 472
Sydenham	8, 459	4, 292	4, 167
Nelson	6, 763	3, 257	3, 506
Oamaru	6, 090	3, 008	3, 082
Napier	5, 756	2, 897	2, 859
Thames	4, 864	2, 537	2, 327
Wanganui	4, 643	2, 328	2, 315
Invercargill	4, 127	2, 204	1, 923
Lyttleton	4, 592	2, 370	2, 222
Caversham	3, 994	2, 061	1, 933
Timaru	3, 923	2, 117	1, 806
Parnell	3, 519	1, 720	1, 799
New Plymouth	3, 326	1, 682	1, 644

AUSTRALASIAN PROGRESS.

It is interesting to compare the progress the colony of New Zealand is making with that of her elder sister, Victoria. In March, 1857, the total population of Victoria was 410,766, while in December, 1858, the total European population of the colony of New Zealand was 59,413, and if the Maori population is added, as is the aboriginal population of Victoria, the total number of human beings in New Zealand on that date would certainly not have exceeded 100,000, considerably less than one-fourth of that living in Victoria twelve months previously.

But the change which the intervening twenty-three years has worked is marvelous, although during that time the people of New Zealand have waged successfully several wars with the natives, circumstances not likely again to occur to retard the progress of the colony. In spite of these wars and other obstacles to progress, during the last twenty-three years, New Zealand has increased its population from being considerably less than one-fourth that of Victoria then to nearly two-thirds that of Victoria to-day. Victoria, during that period, has increased her 410,766 people by 447,816, while the little island colony has increased her 100,000 by no less than 433,801.

This rate of progress is decidedly remarkable, and shows that if the same rate of increase is maintained in the future the premier colony of Australasia will soon be passed in population and other elements of progress by her younger sister.

The increase of the population of New Zealand has been very general all over the colony, and has not been, as in Victoria and New South Wales, a growth chiefly in the towns. The population of New Zealand in 1870 was 248,400, and at the last census it was 489,906, exclusive of Maoris and Chinese, showing that in little over ten years the population had nearly doubled—a fact, I think, unprecedented in the history of any other country. In New Zealand the increase was 97 per cent.; in Victoria it was only 18 per cent. In 1870 the population of New South Wales was 502,861; it is now 750,000, showing an increase of 49 per cent; certainly a very gratifying result, but very far behind that of New Zealand. The growth of New Zealand in wealth has been commensurate with the increase of her population.

In 1870 the value of New Zealand's imports was $23,195,075, and in 1880 the value was $30,810,055.

In 1870 the value of exports was $24,113,630, and in 1880 it was $30,763,460. The net revenue in the years 1870–'71, exclusive of money derived from land sales or appreciated to local bodies, was $5,286,090, while in the years 1880 and 1881 it reached the large sum of $15,619,750.

To show that this is the result of actual growth of wealth instead of an increase of taxation, I will mention that in 1870 the taxation per capita was $16.12½, and now it is about $17.93 per head. In 1870, however, education was not paid for by the state, and if we deduct the cost of education, which is about $2.43 per capita per annum, from the taxation of the present, the amount per head will be 62½ cents less than it was in 1870.

The taxation per head is much larger in the Australasian colonies than in the United States, but in spite of excessive taxation the colonies are making rapid strides in the race of progress. The seven Australasian colonies cover an area of 3,075,736 square miles, exceeding the area of the United States of America, and only some 700,000 square miles less than the entire area of the continent of Europe.

Scattered over this vast territory is a population of 2,798,471 people;

but their trade and wealth bear testimony to the richness of the lands they occupy, and their public works, their cultivations, and flocks and herds attest their enterprise and industry.

The public revenue of Australasia in 1880 amounted to $85,345,075, of which only $30,897,025 came from taxation; $17,274,940 was derived from the disposal of 3,493,659 acres of land, and the balance accrued chiefly for services rendered by the various public departments.

The imports of the colonies amounted to $275,303,325, and the exports to $244,330,840.

The shipping, inward and outward, was 16,102 vessels, of 8,552,600 tons; there were 6,862,750 acres of land under cultivation; the harvest yielded 31,588,928 bushels of wheat; 10,122,508 bushels of oats; 2,912,621 bushels of barley; 354,515 tons of potatoes, and 887,116 tons of hay; there were 1,206,100 horses; 8,104,786 cattle; 72,239,343 sheep, and 1,026,898 pigs. Communication was maintained by 4,851½ miles of railway open, and 1,189 miles in course of construction, and there were 27,831 miles of telegraph line. The net gain of the united colonies for the year by immigration was 43,199; by the excess of births over deaths 59,317; making a total gain for the year, 102,516.

Of the Australasian colonies, New Zealand ranks third in population and the fifth in area, but in productiveness she has distanced all her competitors.

For instance, the total produce of wheat in the seven Australasian colonies was 31,588,928 bushels. The total oat crop of Australasia was 10,122,508; and of this amount New Zealand alone produced 6,891,251 bushels. Victoria follows next, with 2,358,459, and New South Wales produced 356,121, and Queensland 2,081, South Australia, 5,070, Western Australia, 25,080, and Tasmania, 439,440 bushels. The aggregate produce of barley was 2,912,621 bushels; and of this, New Zealand contributed 1,221,241 bushels. In the returns per acre New Zealand is far in advance of the other colonies. The average yield per acre in the four principal colonies in 1880, were:

Districts.	Wheat.	Oats.	Barley.	Potatoes.
	Bushels.	*Bushels.*	*Bushels.*	*Tons.*
New Zealand	25.07	32.05	26.05	4.49
New South Wales	14.69	19.87	20.86	2.73
Victoria	9.95	17.61	15.53	2.79
South Australia	4.96	11.50	11.62	2.89

These figures do not indicate an exceptional harvest, but are the results of the seven years' average. New Zealand also takes the lead in the facilities for transport.

Her long seaboard and multitudinous harbors afford natural highways which none of the other colonies possess; and a larger mileage of railways open for inland traffic. The figures are: New Zealand, 1,258 miles; Victoria, 1,199 miles; New South Wales, 849½ miles; South Australia, 667 miles, and Queensland, 633½ miles. Mr. H. Hayter, the government statist of Victoria, in a table of statistics which he has recently compiled of all the Australasian colonies, sets down the number of acres of land under cultivation in New Zealand at 1,029,764; but these figures do not give a just idea of the extent of land actually under cultivation in this colony.

I learn from the Registrar-General of New Zealand that the land under permanent artificial grass in this colony amounts to 3,537,025

acres, of which 1,567,463 acres had been plowed and 1,969,562 acres had not been plowed. This should be entered as green forage. There are also 54,028 acres of land, embracing some of the plowed and some of the unplowed portion, the grass on which was mowed for hay. If the whole were included it would bring the land under cultivation in New Zealand up to 4,512,761 acres, about 931 acres per head.

The telegraph lines of New Zealand are in splendid working order. They are owned and managed by the government. Many new American inventions are employed on them.

The total number of messages of all codes transmitted during the year 1880 amounted to 1,058,342. There were 3,758 miles of line, carrying 9,587 miles of wire.

During the year, 120 miles of line and 254 miles of wire were erected. The number of miles of line maintained was 3,656, at an average cost of $31.62½ per mile. By the duplex system there are virtually 12,407 miles of wire.

The number of urgent telegrams sent during last year was 33,390, and the number of delayed telegrams during the same period was 88,881, making a total of 122,271. The business, however, of the telegraph department will be greatly increased during the present year. Arrangements have been made for the use of the telephone on a large scale. The expense of erecting such lines will be very small, and it is designed that they will act as feeders to the main trunk lines without trenching on their receipts, as it is intended to limit the remuneration for the work done to a percentage on said work.

G. W. GRIFFIN,
Consul.

UNITED STATES CONSULATE,
Auckland, New Zealand, November 30, 1881.

POPULATION OF BRITISH INDIA.

REPORT BY CONSUL-GENERAL MATTSON, OF CALCUTTA.

The census returns of 1881 for British India give a total population of over 252,000,000, including the native states (*i. e.*, those governed by native princes), which is an enormous increase during the last decade, the exact ratio of which, however, is not known, owing to the incompleteness of former counts. The natives of India are a very prolific people, and arrive at maturity at an early age, so that there is a natural tendency to a very dense population. During the Asiatic governments this tendency was checked by wars, plagues, and famines among the people, but under the beneficent influence of the British rule in India those evils have been almost overcome, and the future promises to the natives a much better condition of life than they ever enjoyed before; hence there is every reason to believe that the ratio of increase will be still greater during the present and following decade.

In the meanwhile western civilization is establishing itself all over the land, and its agency is actively at work exploring mines, constructing railways and canals, erecting mills and factories, improving the methods of agriculture, and clearing the waste lands. The native is working under it and side by side with it, and his eyes are being opened to a better condition of things in general and for himself. He is earning better wages and his strength is being recruited with a sufficiency

of food, and with renewed energy and his awakened appetite for a better kind of existence his wants are increasing, and so far as he is able to procure the means he will be a purchaser of many of the commodities of the West.

The recent abolition of customs duties on imported goods makes this great country practically one of free trade, open to the competition of the world, and it now presents probably a larger and more remunerative field than any other country in the world for foreign trade and commerce, and one particularly deserving the most serious attention of the manufacturers and merchants of our own country.

I will, in my next report, endeavor to point out the way in which a large portion of this trade might be secured to American industry.

The following tables, prepared from the last census returns, are respectfully submitted, in the hope that they may be found of interest:

Population of India by sex.

Territory.	Both sexes.	Males.	Females.
British territory	202, 275, 983	103, 008, 992	99, 258, 991
Native states	50, 265, 227	20, 202, 335	18, 707, 386
Total	252, 541, 210	123, 211, 327	118, 166, 371

NOTE.—The discrepancy in the totals of males and females is owing to the want of sex details for certain provinces.

Percentage according to sex and age.

Sexes.	Under 12.	Adults over 12.	Total.
Males	18. 75	33. 49	51. 38
Females	16. 33	32. 06	48. 50

NOTE.—The small discrepancy in totals is owing to a want of specification in a few places.

Number of females to 100 males	94. 42
Number of children to 100 adults	54. 36
Number of girls to 100 boys	87. 13

Population classified according to religion.

Hindoos (73.01 per cent.)	139, 343, 820
Sikhs (62 per cent.)	1, 174, 436
Mahommedans (21.41 per cent.)	40, 867, 125
Buddhists (1.48 per cent.)	2, 832, 851
Christians (47 per cent.)	897, 682
Others (2.67 per cent.)	5, 102, 816
Religion not known (34 per cent.)	643, 857

Adult male population classified according to occupation.

Government service and profession	2, 401, 630
Domestic occupation	4, 136, 430
Agriculture	37, 393, 055
Commerce	3, 425, 738
Industrial occupations	8, 749, 270
Laborers	8, 137, 062
Independent (non-productive)	2, 283. 069

Cities, towns, and villages classified according to population.

Cities with over 50,000 inhabitants each	44
Cities with from 20,000 to 50,000 inhabitants each	95
Cities with from 15,000 to 20,000 inhabitants each	56
Cities with from 10,000 to 15,000 inhabitants each	207
Towns with from 5,000 to 10,000 inhabitants each	1,060
Towns with from 3,000 to 5,000 inhabitants each	2,517
Towns with from 2,000 to 5,000 inhabitants each	4,872
Towns with from 1,000 to 5,000 inhabitants each	240
Towns with from 1,000 to 2,000 inhabitants each	24,098
Villages less than 1,000 inhabitants	448,320
Not specified	11,517
Total	493,429

Population of the twenty largest cities in India.

Calcutta and suburbs	776,579
Bombay and suburbs	644,405
Madras and suburbs	397,552
Lucknow	284,779
Benares	175,188
Delhi and suburbs	160,553
Patna	158,900
Agra	149,008
Allahabad	143,693
Bangalore	142,513
Amritsar and suburbs	142,381
Lahore	128,441
Cawnpore	122,770
Poona	118,886
Ahmedabad	116,673
Surat	107,149
Bareilly	102,928
Rangoon	108,000
Hourah	97,784
Nagpur	84,441

H. MATTSON,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
Calcutta, April 18, 1882.

EMIGRATION FROM HESSE-DARMSTADT.

REPORT BY COMMERCIAL AGENT SMITH, OF MAYENCE.

During the year 1881 there were 4,173 persons who emigrated from the Grand Duchy of Hesse-Darmstadt to foreign lands, of whom 2,516 were males and 1,657 females, being the largest exodus for any one year at any time during the past ten years. The smallest number for any one year during the same period was in 1877, when only 500 departed. Of the 4,173 mentioned, 2,005 went by way of Bremen, 1,364 via Hamburg, and 838 through Antwerp. Of those who left, 4,168 went to the United States, 1 to Brazil, 1 to Peru, 1 to Chili, and 2 to other South American states. During the period from December 31, 1870, to De-

cember 31, 1881, the following emigration has taken place from the Grand Duchy:

Year.	Males.	Females.	Total.	Via Bremen.	Via Hamburg.	Via Antwerp.
1871	1,722	1,559	3,281	2,241	1,040	.....
1872	2,041	1,632	3,673	2,145	1,469	59
1873	1,027	994	2,021	1,045	900	76
1874	554	444	998	392	568	38
1875	288	243	531	247	259	25
1876	299	236	535	290	199	46
1877	312	188	500	260	206	34
1878	399	266	665	369	255	41
1879	536	353	889	527	247	115
1880	1,956	1,076	3,032	1,433	1,258	341
1881	2,516	1,657	4,173	2,005	1,364	804
Total	11,650	8,648	20,298	10,954	7,765	1,579

Of this number, 20,126 went to the United States, 21 to British North America, 4 to Central America and Mexico, 6 to the West Indies, 63 to Brazil, 16 to the Argentine Republic, 3 to Peru, 9 to Chili, 32 to other South American states, 1 to Africa, and 17 to Australia.

The proportion of males to females, per one hundred, was as follows:

Year.	Males.	Females.
1871	52	48
1872	56	44
1873	51	49
1874	56	44
1875	54	46
1876	56	44
1877	62	38
1878	60	40
1879	60	40
1880	65	35
1881	60	40
1871-1881	57	43

There has thus been an excess of fourteen males in every one hundred emigrants.

The emigration from the various Prussian provinces and German states, during the period from 1871 to 1880, via Bremen, Hamburg, Stettin, and Antwerp, has been as follows, compared with that of Hesse-Darmstadt:

States and provinces.	Number.	Per cent. per 1,000 inhabitants.
Province of East Prussia	70,486	2.2
Province of West Prussia		
Province of Brandenburg, with Berlin	26,087	0.8
Province of Pomerania	64,294	4.4
Province of Posen	54,831	3.4
Province of Silesia	18,092	0.4
Province of Saxony	10,254	0.5
Province of Schleswig-Holstein	34,469	3.3
Province of Hanover	48,236	2.4
Province of Westphalia	14,060	0.7
Province of Hesse-Nassau	21,671	1.5
Province of Rhineland	17,210	0.5
Hohenzollern	597	0.9
Prussia, not designated	671	.....
Total Prussia	379,959	1.5

States and provinces.	Number.	Per cent. per 1,000 inhabitants.
Bavaria:		
Right bank of Rhine	43,320	1.0
Palatinate	11,243	1.8
Saxony	17,284	0.6
Wurtemberg	32,121	1.7
Baden	27,300	1.8
Hesse-Darmstadt	16,125	1.8
Mecklenburg-Schwerin	24,870	4.5
Mecklenburg-Strelitz	2,481	2.6
Thuringian states	9,773	0.9
Oldenburg	6,859	2.2
Brunswick	2,592	0.8
Anhalt	1,058	0.5
Waldeck	846	0.2
Schaumburg-Lippe:		
Lippe	1,496	1.0
Lubeck	701	1.2
Bremen	4,445	3.1
Hamburg	8,628	2.2
Alsace-Lorraine	8,070	0.2
Germany, not designated	981	.....
	595,151	1.4

The emigration from the empire in 1881, as compared with the above table, was as follows:

States and provinces.	Number.	Per cent. per 1,000 inhabitants.	
Province of East Prussia	2,262	8.2	1.2
Province of West Prussia	24,072		17.9
Province of Brandenburg, with Berlin	9,810		3.1
Province of Pomerania	26,106		17.9
Province of Posen	22,594		14.1
Province of Silesia	5,908		1.5
Province of Saxony	8,537		1.6
Province of Schleswig-Holstein	12,269		11.4
Province of Hanover	14,264		7.1
Province of Westphalia	7,404		3.9
Province of Hesse-Nassau	8,410		5.7
Province of Rhineland	8,683		2.3
Hohenzollern	153		2.3
Prussia, not designated	207		.....
Total Prussia	145,679		5.7
Bavaria:			
Right bank of Rhine	13,871		3.2
Palatinate	3,235		5.0
Saxony	9,241		3.3
Wurtemburg	11,470		6.1
Baden	5,825		3.8
Hesse-Darmstadt	4,173		4.7
Mecklenburg-Schwerin	3,795		6.9
Mecklenburg-Strelitz	778		8.1
Thuringian states	2,771		2.5
Oldenburg	2,007		6.3
Brunswick	635		1.9
Anhalt	368		1.7
Lubeck	186		3.3
Bremen	1,449		10.2
Hamburg	3,188		8.2
Alsace-Lorraine	692		0.5
Waldeck	228		4.2
Schaumburg-Lippe	55	3.1	1.7
Lippe	394		3.5
Germany, not designated	507		.....
Total German Empire	210,547		4.9

The rate per cent. is based, in every instance, upon the census of 1875, when the population was 42,727,372.

In Alsace-Lorraine, where one would naturally expect the emigration to be large, it is remarkably low, compared with other parts of the empire.

The rate per cent. seems to have quadrupled last year over the average of the ten preceding years.

JAS. HENRY SMITH,
Commercial Agent.

UNITED STATES COMMERCIAL AGENCY,
Mayence, April 30, 1882.

THE FISHERIES OF CANADA.

BY COMMERCIAL AGENT ROBBINS, OF OTTAWA.

The total value of the production of the fisheries of the Dominion of Canada for the fiscal year ending June 30, 1881, exclusive of the catch in Manitoba and the northwestern territories (of which there are no returns), and compared with 1880, is as follows:

1881	$15,817,162 64
1880	14,499,997 71
Increase in 1881	1,317,182 93

VALUE OF CANADIAN FISHERIES.

Statement showing the value of fisheries of Canada, by provinces, in 1881, *and compared with* 1880:

NOVA SCOTIA.

1881. Value of production	$6,214,781 50
1880. Value of production	6,291,061 46
Decrease in 1881	76,279 96

NEW BRUNSWICK.

1881. Value of production	$2,930,904 58
1880. Value of production	2,744,446 58
Increase in 1881	186,458 00

QUEBEC.

1881. Value of production	$2,751,962 50
1880. Value of production	2,631,556 45
Increase in 1881	120,406 05

PRINCE EDWARD ISLAND.

1881. Value of production	$1,955,289 80
1880. Value of production	1,675,088 90
Increase in 1881	280,200 90

BRITISH COLUMBIA.

1881. Value of production	$1,454,321 26
1880. Value of production	713,335 32
Increase in 1881	740,985 94

Amount estimated for home consumption in British Columbia, of which no record is kept, $4,885,000.

ONTARIO.

1881. Value of production	$509,903 00
1881. Value of production	444,490 00
Increase in 1881	65,412 00

RECAPITULATION.

	1880.	1881.
Nova Scotia	$6,291,061 46	$6,214,781 50
New Brunswick	2,744,446 58	2,930,904 58
Quebec	2,631,556 45	2,751,962 50
Prince Edward Island	1,675,088 90	1,955,289 80
British Columbia	733,335 32	1,454,321 26
Ontario	444,491 00	509,903 00
Totals	14,499,979 71	15,817,162 64
		14,499,979 71
Total increase in 1881		1,317,182 93

EXPENDITURES.

Statement showing the amount of expenditures in the following-named provinces of Canada on account of fisheries, for the fiscal year ending June 30, 1881.

NOVA SCOTIA.

Fishery officers, salaries and disbursements	$14,909 42	
Fish breeding	3,454 29	
		$18,363 71

NEW BRUNSWICK.

Fishery officers, salaries and disbursements	$11,776 56	
Fish-breeding	3,455 91	
		$15,232 47

QUEBEC.

Fishery officers, salaries and disbursements	$15,123 79	
Fish-breeding	5,444 89	
		$20,568 68

PRINCE EDWARD ISLAND.

Fishery officers, salary and disbursements	$2,691 49	
Fish-breeding	852 11	
		$3,543 60

BRITISH COLUMBIA.

Fishery officers, salary and disbursements	$1,721 48

ONTARIO.

Fishery officers, salaries and disbursements	$21,130 41
Total expenditures	$80,560 30

COLLECTIONS.

Statement showing the amount of collections and number of licenses issued in the following named provinces of Canada, on account of fisheries, for the fiscal year ending June 30, 1881.

NOVA SCOTIA.

For fishery licenses, fines, and forfeitures		$2,779 49
Number of licenses issued	78	

NEW BRUNSWICK.

Rents, taxes on nets, fines, and forfeitures		$4,695 28
Number of licenses issued	1,899	

QUEBEC.

Rents, licenses, fees, fines, and forfeitures		$9,286 81
Number of licenses issued	1,012	

PRINCE EDWARD ISLAND.

For fishery license		$40 00
Number of licenses issued	1	

ONTARIO.

Rents, licenses, fees, fines, and confiscations		$7,795 99
Number of licenses issued	1,936	
Total collection		24,597 55
Total licenses	4,926	

NUMBER OF VESSELS, BOATS, AND MEN.

Statement showing the number of vessels and boats employed, and the number of sailors and fishermen engaged in the fisheries of Canada, by provinces, during the fiscal year ending June 30, 1881.

Nova Scotia:	
Number of vessels	647
Number of boats	11,919
Total	12,566
Number of sailors	6,004
Number of fishermen	21,522
Total	27,526
New Brunswick:	
Number of vessels	252
Number of boats	4,305
Total	4,557
Number of sailors	1,174
Number of fishermen	7,563
Total	8,737
Quebec:	
Number of vessels	165
Number of boats	3,083
Number of flats	2,400
Total	5,648
Number of sailors	951
Number of fishermen	9,360
Total	10,311
Prince Edward Island:	
Number of vessels	15
Number of boats	1,117
Total	1,132

Number of sailors	76
Number of fishermen	3,559
Total	3,635
British Columbia:	
Number of steamers	8
Number of schooners	10
Number of boats	375
Number of flats	35
Total	428
Number of sailors	62
Number of fishermen	1,580
Number of shoremen	1,251
Total	2,893
Ontario:	
Number of vessels	23
Number of boats	998
Total	1,021
Number of sailors	92
Number of fishermen	2,516
Total	2,608

RECAPITULATION.

Number of vessels	1,120
Number of boats and flats	24,232
Total	25,352
Number of sailors	8,359
Fishermen and shoremen	47,054
Total	55,413

NOTE.—The foregoing statements are based upon the official report of the Dominion of Canada.

R. R. ROBBINS,
Commercial Agent.

UNITED STATES COMMERCIAL AGENCY,
Ottawa, June 26, 1882.

COMMERCE OF VICTORIA, V. I.

REPORT BY CONSUL FRANCIS.

During the quarter ending March 31, there were seventy arrivals and departures of American vessels nearly all engaged making tri-weekly, semi-monthly, and monthly trips to and from this port, their aggregate tonnage being 42,108. The imports by these arrivals are reported of the value of $359,160, embracing general merchandise, and were from the United States, England, and Canada, the railroad materials chiefly from the States. During the same period there were three arrivals of foreign vessels from England, whose aggregate tonnage was 1,893, with cargoes

valued at $165,000—making the imports into this port reach the value of $524,160. The imports into the other three ports, Nanaimo, Burrard Inlet, and New Westminster, are reported at $45,000, thus raising the imports into the province during the quarter to near $670,000.

The exports from this port during the quarter in American vessels to the United States, as invoiced, including gold dust and bullion, amounted to $120,550.14; from other ports of the province, in American and foreign vessels, $222,003.86, leading articles being coal to California, and lumber and fish, foreign, the coal amounting to $130,504.50.

The weather during the quarter was boisterous, unprecedentedly so, materially interfering with business, but no disasters occurred to the shipping on the coast.

Two schooners and one steamer were built here during the present and preceding quarter. The schooners have steam as an auxiliary, and were designed especially for fur-sealing. On the arrival of the fur-sealing season, fourteen sails of vessels, being of the tonnage from 20 to 80, left this port for the sealing grounds on the west coast of this island. From Washington Territory, twelve sail are off its coast engaged in the same business. So far the season has been very unpropitious. Vessels are experiencing difficulties in procuring Indians, sealers, and competition had caused such an advance for their services, and prices for seal skins, that the profits of the business cannot be otherwise than small. For the best and largest seal skins our buyers are only offering $5. Last season they were paying from $8 to $12. Recent advices from London—the principal market—represent the choicest fur-seal skins only worth £1.

Great preparations are making for the approaching salmon season. Four new canning establishments are being erected, three on Fraser River, and one on the northern coast at Rivers Inlet, making fifteen in the province. It is estimated they will have the materials to put up 200,000 cases. The products of last season are reported as standing fair in the markets to which they were shipped, and that orders have already been received for 150,000 cases of this season's produce. This industry is steadily increasing and becoming a source of great profit to the province.

The construction of the Canadian Pacific Railroad, between the town of Yale, on the Fraser River, and the Kamloops country, is being pushed forward as rapidly as possible by an American contractor, who has also the contract for constructing the road from Yale to the seaboard at Burrard Inlet. The want of laborers was seriously felt last season, but will be obviated this, by the introduction of Chinamen, of whom between eight and nine thousand are expected to arrive here by the middle of May. This movement on the part of the contractor is being generally denounced by the people of the province.

Work on the dry-dock at Esquimalt Harbor has been suspended for the present on account of the want of cement, a large shipment of which was recently lost with the ship Tropic on her voyage from England. Its construction was commenced seven years ago, and over half a million dollars have been expended. Its completion is not anticipated before the summer of 1884.

The prospects of this port and vicinity are assuming a brighter aspect since the provincial Parliament, just closed, have granted a charter to a company of American and resident citizens to build the island railroad. The construction of this road by the Dominion Government was thought secured in the terms of union, but has been a matter of contention ever since this event, finally resulting in the Dominion Government ignoring its construction altogether. The charter is regarded

as a very liberal one—obligates the company to commence its construction the present season; to deposit, sixty days after the passage of the bill, the sum of $250,000 for the faithful performance of the contract, and then secures to the company one million nine hundred thousand acres of land, including all coal and minerals thereon and thereunder. The coal lands embraced in the area are estimated at three hundred thousand acres. The road between Esquimalt Harbor and Nanaimo is to be constructed, equipped, and in running order by the 1st July, 1886, and from Nanaimo to Seymour Narrows, on Johnston's Straits, by the 1st of July, 1890. The entire length of the road will be about 150 miles, passing through a considerable belt of arable and fertile country.

ALLEN FRANCIS,
Consul.

UNITED STATES CONSULATE,
Victoria, V. I., April 20, 1882.

THE IMPERIAL DOCK-YARD AT NAGASAKI.

REPORT BY CONSUL JONES.

The dock-yard at Nagasaki is reported to be, by naval and other authorities, one of the best, if not the very best, in the East. It consists of three departments, viz: the dock at Tatagami, the engine works at Akanoura, and the patent slip at Koski.

The dock is situated at Tatagami, in a deep gorge between two hills, opposite the city of Nagasaki, and is well protected and easily accessible to ships of the largest tonnage, at the proper tide.

The dock and all the land on that side of the harbor was formerly the property of the Prince of Hizen, who was a wealthy daimio in the feudal days of Japan and one of the governors of Nagasaki. He it was who conceived the first idea of a dock-yard at this place, and by the assistance of the Dutch, who at that time occupied the island of Decima, which is now a part of Nagasaki, commenced the construction of the machine shops, and ordered from Holland the necessary machinery.

About this time (some twenty years ago) the Taikan (Tycoon) became possessed of an expensive toy of a paddle-wheel steamship, brought out to the water of Japan on speculation by the Dutch. The steamship captivated the fancy of the daimio, who gave a portion of the peninsula, including the grounds of the dock-yard, in exchange for the steamer; and there the dock-yard became the property of the Japanese Government.

For several years these works were under the superintendence of Dutch engineers from their own country; but when the port of Nagasaki was opened to foreign ships and traffic, these were all replaced by English employés.

At the present time the dock-yard is a branch of the manufacturing section of the imperial public works department, the headquarters of which are at Tokio, the seat of government. The original construction of the dock under Dutch superintendence was begun in 1865, but was not completed. In 1874, when the Japanese commenced to acquire a navy and became alive to the importance of docks and ship-yards, they set to work to rebuild this one. Five years were occupied in its reconstruction, and in 1879 it was completed and opened to the public with imposing ceremonies.

The stone work is massive, well put together and finished, and of great durability, the whole dock being faced with large blocks of dressed granite, exhibiting altogether a work of the most thorough and solid character. The cost of the construction was 403,000 yen. The yen is known as the paper currency of the country, and at this time was about par with a silver dollar.

The labor in the construction cost from 15 to 45 sens per day per man. The sen corresponds with the copper cent in America, but about two mills less in value.

The dimensions of the dock are as follows: Extreme length, 460 feet; width at entrance, at top, 90 feet; width of bottom, 77 feet; the depth of water on the sill at spring tides, 27 feet 6 inches; at ordinary tides, 25 feet.

The pumping machinery, which was made at the engine works of the yard, consists of four 13-inch centrifugal pumps, driven by two horizontal coupled engines of 120 indicated horse-power. The time required for emptying the dock is six hours, and for filling it one and a half hours.

During the past year a number of the largest sized ships of war of foreign nations on the Asiatic station were docked at this yard, among which were H. B. M. S. Inconstant, 350 feet long, 50 feet beam; H. B. M. S. Iron Duke, 3,367 tons; His Russian Majesty's ship Prince Pojarsky, 2,379 tons; H. R. M. S. Europa, 2,054 tons, and the U. S. S. Richmond, 1,382 tons.

The total number of vessels docked in the past year was 31, representing a gross tonnage of 36,200 tons.

It is the intention of the government, I was informed, to commence iron shipbuilding on the grounds attached to the dock, where there is sufficient space to lay down three large vessels, and for the workshops, &c., necessary in their construction. It is intended, also, to erect storesheds, barracks, powder magazines, and other buildings for the convenience of vessels when in dock. Arrangements have already been made for these improvements, and the work will be commenced at an early day.

The engine works at Akanoura, connected with the dock, are situated on the same side of the harbor, a few hundred yards north, and in easy communication with it, on ground and with water approach admirably adapted for the purpose. These works were also originally built by the Prince of Hizen, and passed at the same time with the dock to the possession of the government. Their construction was commenced in 1874, under the superintendence of Mr. F. R. Storie, an engineer-in-chief in his profession, who is still in charge, and to whose courtesy I am indebted for a detailed examination of the dock-yard and the data for this report.

The works cover a space of seven acres of ground, and are very complete and fully equipped for the construction and repair of any sort of machinery. The buildings are commodious, well arranged, and substantially constructed of brick and stone. These buildings and their uses are as follows, viz:

The general office, for the accommodation of the officers of the yard, clerks, draughtsmen, &c., is situated on the most pleasant part of the grounds, overlooking the approaches by water and commanding a fine view of the harbor and of the city on the opposite side of the bay.

The machine shop measures 150 feet in length and 80 feet in width, and contains machine tools of all descriptions, and a 10-ton overhead traveling crane of 38 feet span.

The erecting shop is 107 feet long and 50 feet wide, with a 15-ton overhead traveling crane of 50 feet span.

The forge is 130 feet long and 50 feet wide, and contains 18 smiths' fires, 1 furnace, 1 2-ton steam-hammer, and two small 3-cwt. steam-hammers.

The foundry measures 130 feet in length, is 46 feet wide, and contains three brass-air furnaces, each capable of melting 200 pounds of brass at one time. In the center of the floor of this building is one 10-ton and one 5-ton crane; also two large wrought-iron tanks for molding large cylinders and other heavy castings. Outside of the foundry are two cupolas, capable of melting iron for a casting of 15 tons weight, and a large drying oven, the latter connected with the cranes within by a tramway.

The pattern-makers' and carpenters' shop is a double flat building, measuring 153 feet in length and 50 feet in width. The ground floor of this is occupied by the pattern-makers and carpenters. The patterns, &c., are stored on the upper flat. The wood-working machinery of this shop consists of circular saw, one handsaw, two turning-lathes, and some other small machines. The Japanese workmen, through the force of custom and education, prefer to do their work by hand.

The boiler shop is 130 feet long and 75 feet wide, and contains powcerful punching and shearing machines, bending-rolls, drilling and table cutting machines; also, a hydraulic riveting machine and a powerful hydraulic crane or lift overhead, suitable for the construction of the heaviest class of boiler work. This building also contains one plate and angle iron furnace, one rivet furnace, and four common fires for general work. The power for driving the machinery in this shop is carried by an underground shaft from the machine-shop engine.

The coppersmiths' shop is a small building 50 feet long and 25 feet wide, and is fitted with all necessary appliances for pipe making and general coppersmith's work. In connection with this building is the galvanizing shed for galvanizing the bolts, spikes, &c., used in ship-building.

The storehouse is 305 feet long and 24 feet wide, the center part of which for a length of 60 feet has an upper flat, in which are the storekeeper's office and general stores, such as files, nails, brass fittings, &c. The wings on each side are fitted with racks for storing bar and plate iron of all descriptions, brass and iron boiler tubes, &c. At the end of this building is a machine store 50 feet long and 25 feet wide.

The iron used in these works has been imported heretofore from England, but at the present time they are receiving a very fair quality of native pig iron from the mines in the interior, recently opened. The copper for smelting purposes is also received from native mines. That which is used for other and finer purposes is imported from England. The leather belting, &c., all comes from England.

The grounds about the engine works, fronting the bay, are defended by a sea-wall of heavy stone masonry, and in front of the machine shop is a fine stone jetty, on which is placed a pair of shear-legs capable of lifting 40 tons weight. The depth of water at the jetty at low tide is 20 feet.

There are employed at the dock-yard, which comprehends the three branches of the establishment at Nagasaki, 900 workmen, all Japanese. Five hundred and fifty of these are machinists and pattern makers in the engine shops, who are represented to be expert workmen at all light work. Japanese carpenters are famous the world over for their skillful work, and have few, if any, superiors in that line.

The engine works have turned out a number of portable and horizontal engines of all sizes, hauling-engines for mining purposes, steam pumps and marine engines, which have been pronounced by capable engineers to be of the most creditable workmanship, and fully comparable with the machinery of European manufacture. They have now under construction two compound engines, of 1,000 indicated horse-power, for native vessels built at the yard.

The ship-building department of the dock-yard, at present, is situated directly opposite the dock, on the east side of the bay, and is commonly known as the "Patent Slip," at Koski. The excavation for this slip was commenced originally, some 15 years ago, by the Prince of Satsuma, in emulation of the modern enterprises of his colleague, the Prince of Hizen, in building the dock, and who expended about $10,000 in the work, and then sold it to other parties, from whom it passed into the possession of the government.

The machinery for this slip was constructed at Aberdeen in Scotland, and with capacity for hauling up a vessel of 16,000 tons.

The length of the hauling carriage is 220 feet. The depth of water over carriage when run out, is 9 feet 6 inches forward and 18 feet aft.

The time required for hauling up a vessel on the slip, including blocking up on the carriage, is two hours. There are connected with the slip the necessary buildings, working sheds, &c.

A large number of wooden vessels for coast and inland navigation have been built at this slip, five of which were completed and launched during the past year.

The total revenue from the imperial dock-yard at Nagasaki for the year 1881 was $326,000.

A. C. JONES,
Consul.

UNITED STATES CONSULATE,
Nagasaki, Japan, May 6, 1882.

List of charges of the Imperial Government dock, Nagasaki.

All vessels under 300 tons (gross tonnage)	$350
All vessels from 300 tons to 400 tons	375
All vessels from 400 tons to 500 tons	400
All vessels from 500 tons to 600 tons	425
All vessels from 600 tons to 700 tons	450
All vessels from 700 tons to 800 tons	475
All vessels from 800 tons to 900 tons	500
All vessels from 900 tons to 1,000 tons	525
All vessels from 1,000 tons to 1,200 tons	550

(For tons above 1,200, 45 cents per ton extra.)

For the amount stated above, the vessel is allowed to remain in dock for three days from the day the caisson shall have been in its place, and for every day after the third, the following charge is made:

	Per day.
Under 300 tons	$35
From 300 tons to 400 tons	40
From 400 tons to 500 tons	45
From 500 tons to 600 tons	50
From 600 tons to 700 tons	55
From 700 tons to 800 tons	60
From 800 tons to 900 tons	65
From 900 tons to 1,000 tons	70
From 1,000 tons to 1,200 tons	75

(For tons above 1,200, 5 cents per ton extra.)

The Imperial Government slip, Nagasaki.

All vessels under 100 tons (gross tonnage)	$160
All vessels from 100 tons to 150 tons	180
All vessels from 150 tons to 200 tons	200
All vessels from 200 tons to 250 tons	220
All vessels from 250 tons to 300 tons	240
All vessels from 300 tons to 350 tons	260
All vessels from 350 tons to 400 tons	280
All vessels from 400 tons to 450 tons	300
All vessels from 450 tons to 500 tons	320
All vessels from 500 tons to 550 tons	340
All vessels from 550 tons to 600 tons	360
All vessels from 600 tons to 650 tons	380
All vessels from 650 tons to 700 tons	400
All vessels from 700 tons to 750 tons	420
All vessels from 750 tons to 800 tons	440
All vessels from 800 tons to 850 tons	460
All vessels from 850 tons to 900 tons	480
All vessels from 900 tons to 950 tons	500
All vessels from 950 tons to 1,000 tons	520
All vessels from 1,000 tons to 1,050 tons	540
All vessels from 1,050 tons to 1,100 tons	560
All vessels from 1,100 tons to 1,150 tons	580
All vessels from 1,150 tons to 1,200 tons	600

For the amount stated above, the vessel is allowed to remain on slip for three days, and for every day after the third, the following charge is made:

	Per day.
Under 100 tons	$16
From 100 tons to 150 tons	18
From 150 tons to 200 tons	20
From 200 tons to 250 tons	22
From 250 tons to 300 tons	24
From 300 tons to 350 tons	26
From 350 tons to 400 tons	28
From 400 tons to 450 tons	30
From 450 tons to 500 tons	32
From 500 tons to 550 tons	34
From 550 tons to 600 tons	36
From 600 tons to 650 tons	38
From 650 tons to 700 tons	40
From 700 tons to 750 tons	42
From 750 tons to 800 tons	44
From 800 tons to 850 tons	46
From 850 tons to 900 tons	48
From 900 tons to 950 tons	50
From 950 tons to 1,000 tons	52
From 1,000 tons to 1,050 tons	54
From 1,050 tons to 1,100 tons	56
From 1,100 tons to 1,150 tons	58
From 1,150 tons to 1,200 tons	60

EARTHQUAKES IN JAPAN.

REPORT BY CONSUL JONES, OF NAGASAKI.

In the 5th year of Iukiô Tennô (416, A. D.) a great earthquake took place on the 14th day, 7th month, and the Imperial Palace was thrown down.

On the 27th day, 4th month, 7th year of Suiko Tennô (599), a severe shock destroyed all the buildings of Yamato, and prayer was ordered to the god of earthquakes in all parts of the empire.

In the 1st year of Kokioku Tennô (642) Yamato was visited on the 8th day, 10th month, by a severe shock, accompanied by heavy rain, and the trembling of the earth lasted till the 14th day.

One took place at Yamato on the 11th month, 4th year, of Temmu Tennô (676), and another on the 14th day, 6th month, 6th year, of the same Tennô (678).

A tremendous earthquake took place at Tsukushi (Chikusea and Chikugo) on the 12th month, 7th year, of Temmu Tennô (679), and caused many fissures and chasms, of which the largest was 23,000 *shaku*, or more than four miles in length and twenty shaku in width. A farmer's hut on a hill was carried to a new place by the motion, in such a manner that the dweller was not aware of the fact till the next morning.

In the 11th year of Temmu Tennô (683) a shock was felt at Yamato on the 12th day, 8th month.

An earthquake took place on the 14th day, 10th month, 13th year, of Temmu Tennô (685), and innumerable lives were lost in many provinces. Shikoku suffered most; the hot spring of the province of Iyo ceased to flow, and on the sea coast of Tosa a tract of land about 500,000 *chô*, or nearly 2,000 acres in area, sank down permanently.

In the 14th year of Temmu Tennô (686) a shock was felt at Yamato on the 10th day, 12th month, and another on the 24th day, 3d month, of Taiko (701) at Tamba.

In the 1st year of Reiki (715) Totomi was visited by a severe earthquake. By the enormous masses of earth detached from the hills the course of the Aratama River was interrupted, and three counties—Fuchi, Chôge, and Ishida—were converted into a temporary lake.

A shock was felt on the 7th day, 4th month, 6th year of Tempei (729). In many places streams were dammed up by land slips, and fissures were formed.

On the 5th month, 16th year of Tempei (744), an earthquake, accompanied by heavy rain, took place at Higo, and caused land slides at 280 places. The counties Amakura, Yatsushiro, and Ashinokita were flooded and 1,500 lives were lost.

A violent shock was felt at Mino on the 4th month, 17th year of Tempei (745), and caused a great destruction of life and property, and the trembling of the earth did not cease for a month.

On the 9th day, 5th month, 6th year of Tempei-Hôji (762), a severe earthquake took place at Mino, Hida, and Shinano.

One was felt at Kiôto on the 14th day, 8th month, 16th year of Enreki (797), and shook down many buildings, and another took place on the 5th month, 2d year of Taido (807).

On the 7th month, 9th year of Kojin (819), Sagami, Musashi, Shimosa, Hitachi, Kôdzuke and Shmoôdzuke were visited by a violent shock, and mountains were rent asunder in several places and innumerable lives were lost. These provinces were released from the land tax of the year.

In the 4th year of Tenchô (827), a shock was felt at Kiôto on the 12th day, 7th month, and many buildings were thrown down; on the same day, besides the severe shock, there were three less severe, and from the 14th till the end of the month there were shocks almost every hour. Succeeding these, shocks occurred fourteen times during the next month, and four times respectively, in the remaining months of the year.

The subterranean disturbances, at first begun in 827, did not cease without further damage to the country. A severe shock was felt at Kiôto on the 23d day, 10th month, of the next year. Another in the 3d month of the following year, and finally, on the 3d day, 1st month, 7th

year of Tenchô (829), a terrific convulsion took place at Dewa, and overturned the castle of Akita. Deep fissures and chasms were formed in every direction, and the Akita River was dried up. From that day till the 28th of the month there were on an average four shocks in an hour. Kiôto was visited by a violent shock on the 24th day, 2d month, 10th year, Tenchô (833), and again on the 20th day, 5th month, 3d year of Sherova (836).

On the 11th day, 2d month, 8th year, of Shiowa (814), ninety-four successive and severe shocks visited Shinaao and caused great destruction. In the same year anothêr was felt at Idzu.

The province of Dewa was shaken violently on the 10th month, 3d year of Kashô (850), the earth opening in many places, and large masses became detached from the mountains, destroying many lives.

An earthquake took place on the 5th month, 5th day, 2d year of Saikô (855), and the head of the famous Daibutsu (Idol), of Nara, was thrown down, and another shocked violently the city of Kiôto in the 3d month of the following year.

On the 17th day, 6th month, 5th year of Jiôgan (863), Yechigo and Yetchin were shattered, overwhelming many people. The ground was traversed by numerous fissures, which belched forth great quantities of water.

One was felt at Kiôto on the 12th day, 10th month, 6th year of Jiôgan (864).

On the 8th day, 7th month, 10th year, Jiôgan (868), Kiôto and its vicinity were violently shaken, and many buildings were destroyed.

The next great earthquake on record took place in the province of Mutsu on the 26th day, 5th month, 11th year of Jiôgan (869). The sky was illuminated, and the movement of the ground was so violent that the people could not stand up, and many of them were crushed by falling houses, and others were swallowed up in fissures. Soon afterward the sea rolled in upon the coast with a tremendous noise and washed away thousands of the people.

Kiôto was visited by severe shocks on the 14th day, 4th month, 15th year of Jiógan (873), the 29th day, 12th month of the following year (874), the 11th day, 3d month, 19th year of Jiôgan (876), and the 17th day, 10th month, 1st year Genkei (877).

A violent earthquake was felt in many provinces on the 29th day, 9th month, 2d year of Genkei (878). In the provinces of Sagami and Musarhi it was felt worse, and no house was left without injury.

One was felt at Kiôto on the 22d day, 3d month, 3d year of Genkei (880), and another on the 2d day, 3d month, 4th year of Genkei (881).

In the same year the province of Idzumo was violently shaken on the 4th day, 10th month, and all buildings were thrown down. In the 12th month several shocks were felt at Kiôto, and caused great damage to the city. The earth did not become entirely quiet until the end of the following year.

One which took place at Kioto on the 14th day, 4th month, 1st year, Jinwa (885), was accompanied by heavy rain, and on the 20th day, 12th month, a noise like that of falling houses was heard in the sky at Kioto, which was soon followed by a severe shock.

In the 2d year Genwa (886) one was felt at Kioto on the 15th day, 16th month.

On the 30th day, 7th month, 3d year of Jinwa (887), a severe shock was felt throughout the country, throwing down houses and causing great sea waves, by which innumerable lives were lost. The province of Setsu suffered most severely by the waves. In the province of Shinano the

courses of the great rivers were dammed up by land slides, and several countries were converted into a temporary lake.

An earthquake accompanied by an underground noise was felt at Kioto on the 24th day, 7th month, 2d year, Yengi (901); and another on the 24th day, 5th month, 4th year, Shohei (934).

Kioto was shaken severely on the 15th day, 4th month, 1st year, Tenkei (938); and several buildings were overturned, and again on the 3rd day, 6 month; this time heavy rain accompanied the shock.

One was felt at Kioto on the 21st day, 9th month, 2d year, (Koho 965); another on the 3d day, 8th month, 1st year, Auwa (968); still another on the 14th day, 2d month, 3d year, Tenrokue, (972.)

On the 18th day, 6th month, 1st year, Teigen (976) a terrific shock visited Kioto and its vicinity, shaking down many buildings, including the Imperial Palace, the temples Toji, Saigi, and Susuigi. In the last-named temple above fifty priests were crushed. In the province of Omi the trembling of the ground lasted till the 23d day of the following month.

Kiôto was visited by severe earthquakes on the 4th day, 2d month, 2d year, Teigen (977); and 18th day, 11th month, 2d year, Eikan (984); the 6th day, 11th month, 4th day, Chowa (1015); the 11th day, 3d month, 4th year, Mangi (1024); the 5th day, 3d month, 5th year, Chôgen (1032); the 8th day, 9th month, 1st year, Chôkin (1040); the 2d day, 7th month, following year (1041); the 18th day, 6th month, 3d year, Kôkei (1058); the 6th day, 5th month, following year (1059); and the 7th day, 5th month, 1st year, Chireki (1065).

An earthquake took place at Kiôto on the 20th day, 10th month, 2d year, Yenkin (1069), and threw down many buildings.

On the 7th day, 8th month, 5th year, Kanji (1091), Yamashino and Yamato were violently shaken, and several temples were overturned.

Kiôto felt severe shocks on the 21st day, 11th month, 2d year, Yeichô (1096).

On the 8th day, 7th month, 1st year, Bunji (1185), violent shocks were felt at Kiôto. The ground undulated like sea waves, shaking down the temples Tokucho-juin, Rengiô-in, and Saishoko-in. This is the only recorded destructive earthquake of the 12th century.

One was felt at Kamakura on the 21st day, 5th month, 1st year Kempô (1213), causing great destruction.

One occurred at Kiôto on the 6th day, 9th month, 3d year, Kempô (1215).

Kiôto was violently shaken on the 7th day, 2d month, 2d year, Jinji (1240), and on the 19th day, 5th month, 6th year, Kenchô (1254).

On the 23d day, 8th month, 1st year, Shôka (1257), a great earthquake took place at Kamakura, overturning all houses. In many places mountains were violently rent, and innumerable fissures were formed, from which a bluish flame issued.

On the 13th day, 4th month, 1st year, Eijin (1293), Kamakura and several other places were visited by a violent shock, the temples Jufukuji, Engakuji, and Daihiji being destroyed, and 21,024 persons perished in the catastrophe.

One occurred on the 25thday, 4th month, 1st year, Shôan (1299), overturning the pagodas of Shitennoji of Ôsaka and Nanzenji of Kiôto. The number which perished in this earthquake is estimated at 10,000.

One which took place on the 1st month, 1st year, Bumpô (1324), shook down the pagoda of Tôji of Kiôto.

One occurred in 11th month, 1st year, Seichu (1324), and a part of Chikubushima in the lake Biwa sank down.

On the 3rd day, 7th month, 1st year, Genkô (1331), a shock took place, and a beach about twenty *cho* in length was permanently upraised at Chisato-no-hama in Kishin. Four days afterwards another violent earthquake occurred, and the sumit of Fuji-san fell in, losing over 100 feet of its height.

Kiôto was violently shaken on the 27th day, 8th month, 1st year, Kembu (1332), the 19th day, 7th month, 1st year, Rekiou (1338); the 19th day, 2d month 2d year, Kwanwo (1340); and the 20th day, 6th month, 1st year, Kôan (1352).

Several severe shocks took place in the 6th month, 5th year, Yenbun (1360), causing great sea waves which rushed in upon Awajishima and overwhelmed all the inhabitants.

In the 9th year, Ôyei (1402), a comet appeared in the spring, a great famine occurred in the summer, a typhoon in the fall, and a great earthquake in the winter.

In the 10th month, 26th year, Ôyei (1417), Kwantô was violently shaken. One was felt at Kiôto in the 3d month, 30th year, Ôyei (1419).

On the 16th day, 9th month, 4th year, Yeikio (1432), one was felt at Kiôto, and land-slips occurred in many places.

In the 5th year, Yeikiô (1433), a violent shock occured at Kamakura, causing many land-slides.

On the 8th day, 9th month, 12th year, Yeikiô (1440), one was felt at Kiôto.

On the 10th day, 4th month, 1st year, Hotoku (1449), Kiôto felt a severe shock which rent Yawata-yama, and threw down many buildings.

Kiôto was visited by severe shocks on the 30th day, 12th month, 1st year, Kasho (1455); in the 2d month, 1st year, Kwansei (1460); on the 29th day, 12th month, 1st year, Bunsei (1466); in the 10th month, 2d year, Meiô (1493); and on the 7th day, 5th month, the following, year (1494).

On the 15th day, 8th month, 4th year, Meiô (1495), one occurred at Kamakura, and the Daibutsu was injured.

On the 19th day, 8th month, 7th year, Meiô (1497), a severe earthquake occurred, and the coasts of Isé, Kii, and Mikawa were devastated by great sea waves.

One was felt on the 7th day, 8th month, 7th year, Geishô (1510), and many people perished in the provinces surrounding Kiôto.

On the following day another severe shock was felt, and on the 28th a considerable area of land in the province of Tolômi sunk down, and the place is now known as the ferry of Imagire. Kiôto was shaken severely on the 6th month, 9th year, Gieshô (1512); on the 8th day, 4th month, 11th year, Geishô (1514); in the 2d month, 2d year, Koji (1556); and on the 19th day, 11th month, 13th year, Tenshô (1583).

The provinces of Suruga and Totômi felt a severe shock in the 2d month, 17th year, Tenshô (1589), and many houses were thrown down.

On the 12th day, 7th month, 1st year, Keichô (1596), a great earthquake took place, shaking down the castle of Fushimi and many houses of Kiôto, under which a great number of the inhabitants were buried. The falling down of the Daibutsu of Kiôto in the earthquake is the subject of an anecdote. Taikô Hideyoshi, after the earthquake, set out to Kiôto from Fushimi, taking with him Tokugawa Iyeyasu, to see what had been the fate of the imperial palace. On his way he passed by Hokoji, and when he saw the Daibutsu in ruins his face was flushed with anger, and he said, scornfully, "I placed you here at an immense expense, with no other purpose than that you might watch over and help the people, but you cannot even help yourself"; and with that he shot an arrow at the broken idol. It is also said that many maids of Hide-

yorki were buried under the falling buildings of Fushimi, and the vacancies so caused were filled with courtesans from Ôsaka.

In 1596 there was a great earthquake in Japan, and the trembling of the earth did not cease at Kiôto for forty days. In Sakai sixty houses, and in Nagahama about one thousand houses, were shaken down. At Kiôto the famous Daibutsu and many houses were destroyed, and great sea waves rolled in upon the sea coast of Wakasa, and washed away a commercial town. Land-slides from the hill upon which the castle Ôgaki of Mino was situated, filled up a neighboring swamp, and in many parts of the country there were formed new ponds of such size that a musket-ball could not pass over.

On the 25th day, 10th month, 19th year, Keichô (1614), an earthquake was felt at Kiôto. One was felt on the 11th day, 1st month, 4th year, Kanyei (1627).

On the 20th day, 1st month, 10th year Kangei, (1633), Odawara was violently shaken and many lives were lost.

Yedo was visited by a great earthquake on the 13th day, 5th month, 4th year, Shôhô (1645), and many houses of Daimiôs were injured.

An earthquake occurred on the 22d day, 4th month, 1st year, Keian (1648), and land-slides took place at Hakone.

On the 5th day, 2d month, 2d year, Keian (1649), the province of Iyo felt a severe shock, and the castle was greatly injured. On the 20th day, 6th month of the same year, a shock was felt at Gedo, shaking down many houses and causing the death of numerous inhabitants.

One was felt in many provinces surrounding Gedo in the 3d year, Keian (1651).

On the 1st day, 5th month, 2d year, Kwanbwu (1662), a severe shock took place in the province of Ômi, causing land slides at Kuchigi, Iani, which overwhelmed many houses and inhabitants.

On the 11th month of the same year one was felt at Ôsumi, and a new beach was raised.

Matsumaye was violently shaken on the 25th day, 7th month, 3d year, Kanbun (1663).

On the 6th day, 12th month of the same year, Kiôto felt a severe shock, the Castle of Nijo and other public buildings were damaged.

On the 27th day, 12th month of the following year, Takata in Gechigo, felt a severe shock, and many people perished.

On the 22d day, 5th month, 3d year, Tenwa (1683), a severe shock took place at Nikkô, causing great damage to the temples.

On the 22d day, 11th month, 11th year, Genroku (1703), a violent convulsion took place, causing many land-slides at Hakone, and destroying the town of Odawara. In Yedo several houses of Daimiôs were overturned. The famous scholar, Arai Hakuseki, was then living at Yedo, and in his autobiography is the following:

A little after midnight I was awakened by a sudden convulsion of the earth, and snatching my swords I rushed out. All the partitions and doors fell down, and my wife and children were already out of doors. As the back of my house was near a high precipice I took my family to the front of the house for safety, and lest the earth should open at any time I brought out several doors and made my family sit on them, I then made preparations to go to my prince's house, taking with me three servants, and bidding the others to stay with my family. In order to fetch a small medicine box I went into the house, which was rocking to and fro like a vessel on waves, and I was so confused that while I took a new dress out, I forgot all about the box and ran out. When I was passing by the eastern gate of Kaada Miôjia, another convulsion took place. All houses thereabout were thrown down, and many people were huddled together in the middle of the streets. I saw a light in a house and I thought unless it were put out soon a great fire would occur. On the northern side of Shôhei Bashi I met Asakura Gôzô who was just coming to my house. So asking him to take care of

my family I crossed the bridge and ran toward the south. On turning to the west, and then to the south, I saw by the moonlight Fujiye Wakasa-nokami on horseback hesitating to proceed, because a fissure in front of him was sending forth a stream of water. "Follow me, my men," I said to my servants, and they all crossed the stream with me. By getting wet my straw shoes became very heavy, so I put on a new pair and rushed toward Kan-Bashi. By this time another severe shock occurred and noises of falling houses, and the cry of helpless women and children.

Kiôto felt a severe shock on the 15th day, 9th month, 3d year, Hôyei (1706). On the 4th day, 10th month, 4th year, Hoyei (1707), the weather was hot and calm; suddenly a terrific earthquake occurred in the provinces along the Tôkaidô, causing many fissures and chasms.

Along the coasts of Shikoku and the Tôkaidô great sea waves rolled in and swept away multitudes of people. Tôtômi-kii Setsu, Tosa Iyo, and Idzu suffered most, and on the 11th month a frightful eruption of Fuji-san occurred, and a new peak on the side of the mountain, now called Hôyei-san, was produced. By this earthquake the eastern coast of the empire was elevated, while the western coast subsided.

On the 21st day, 11th month, 8th year, Kiôhô (1723), a severe shock was felt at Kiu-Shiu.

Nagasaki was shaken violently on the 25th day, 9th month, 10th year, Kiôhô. On the 29th day, 2d month, year Hôieki (1751), a shock was felt at Kiôtô, shaking down many buildings.

Yechigo was visited by a great earthquake on the 25th day, 4th month, of the same year; mountains were rent in many places and 16,300 lives were lost. A place called Kami Nadachi was also destroyed in this earthquake, and the following account is found in the book called Toyuki:

"Thirty-five years ago (1751) a mountain, the back of Kami Nadachi having been rent into two, sunk down to the bottom of the sea, taking with it the whole town. To this day nothing grows on the side of the rent and it looks like a white wall.

"The inhabitants of Shimo Nadachi relate the following story: The night of the great earthquake was very calm and clear, and the inhabitants of Kami Nadachi went out catching the fish *tarra* and *ka rei*. As these fish were caught better at some distance from the shore, most of the people had gone out eight or nine miles, looking back to the shore they beheld the sky in the direction of Kami Nadachi illuminated. They naturally thought the place had caught fire and hastily went back, but nothing had happened on the shore while they were away. It was not long before a terrific sound like a discharge of a large cannon was heard under ground, and suddenly the whole town with its inhabitants, with the exception of one woman, sank to the bottom of the sea. This woman was found clinging to a tree which was floating on the water."

On the 30th day, 7th month, 6th year, Horeki (1757), an earthquake was felt in Omi.

A severe shock took place in Ôshin on the 28th day, 1st month, 3d year, Meiwa (1665).

One was felt at Yedo on the 2d day, 6th month, 8th year, Meiwa (1771).

On the 15th day, 7th month, 2d year, Temmei (1782), a violent shock was felt at Yedo, destroying many buildings. At this time Odawara suffered most, and the castle was greatly injured.

Yedo felt a severe shock on the 2d day, 2d month, 3d year, Temmei (1783).

At Hizen an eruption of Unsougadake took place, accompanied by severe shocks, on the 2d month, 4th year, Kansei (1792).

On the 15th day, 11th month, 3d year, Kiowa (1803), Sado was visited by a severe shock.

In the 1st year, Bunkwa (1804), the province of Dewa was shaken violently and Hisagatayama (volcano) subsided.

From the 21st to 34th day, 2d month, 6th year, Bunkwa (1810), Atsumi of Shinshiu felt severe shocks, and on the 24th a tract of land about 5,400 feet in length and 3,000 feet in width subsided, but no life was lost.

On New Year's day of the 7th year, Bunkwa (1811), several violent shocks were felt at Sado. Yedo and its vicinity was shaken violently on the 4th day, 11th month, 9th year, Bunkwa (1813), and at Kanagawa and Hodogaya many houses were overturned. The provinces surrounding Kiôtô felt a severe shock on the 12th day, 6th month, 2d year, Bunsei (1819).

In the provinces of Ôshin and Yezo 150 severe shocks were felt in the 1st month, 5th year, Bunkwa (1822); on the 12th day, 11th month, 11th year, Bunsei (1828), Gechigo experienced a violent shock, which caused great destruction to Nagaoka and Sanjô.

On the 2d day, 7th month, 1st year, Tempô (1830), a violent convultion occured at Kiôtô, shaking down the castle of Nijô and many important buildings. The trembling lasted till the end of the 8th month. On the 24th day, 3d month, 4th year, Nôka (1847), a terrific earthquake took place at Shinano, causing fissues and land-slides. At Zenkôji it happened to be a festival day, and thousands of people had assembled there from different parts of the country when the severe shock occurred, and a great many lives were lost. At several places enormous masses from the hills were thrown down into the course of the rivers so as to give rise to a lake. In the place called Nakano 2,115 houses were demolished, 578 persons killed, and 1,460 wounded.

On the 2d day, 2d month, 6th year, Kayei (1853), a severe earthquake was felt at Odawara.

On the 4th day, 11th month, 1st year, Ansei (1854), the provinces of Suruga, Mikawa, Tôtômi, Ise Iga, Setsu, Harima, and the island of Skikoku were severely shaken, the earth opening in many places and throwing up mud and water. On the sea coast great waves rolled in and washed away many persons. A friend has kindly furnished me with a journal kept by a gentleman of Tosa, during the earthquake. It runs thus:

Fifth day.—At the hour of the monkey (about 3.30 p. m.) a great shock came from northwest, with a noise like that of a typhoon. The ground heaved like waves of water. Afterwards enormous waves rushed up the rivers, and the city of Kôchi caught fire. Seventy different shocks occured in the night. The weather was very cold.

MEM.—The shocks were different in force and direction; some were accompanied with noises, and sometimes noises were heard without any shock. The shocks with noises were generally not so severe as those without them.

By the first great convulsion the earth opened, land-slides took place from the mountains, rivers were flooded, and all dwelling-houses and fire-proof store-houses were either thrown down or severely wrenched.

While we were standing helpless there rose a flame in the direction of Kôchi. As the night approached it spread rapidly, and its reflection from clouds made the night as bright as day. At about eight o'clock a great noise was heard, and on inquiring its cause I was told that great sea waves were rushing in upon the land. The confusion of the moment was indescribable. The people all rushed toward the high land, some taking with them nothing but the night clothes they had on.

6th day.—The earth trembled forty-five times.

MEM.—The temperature was unusually warm by day and cold at night.

7th day.—The earth trembled fifty-three times.

This journal runs to the 26th, 1st month of the following year, and shows there were shocks every day, varying in number from one to fifty-three.

The total number of shocks at Tôsa in the fourteen months was 817. It was this earthquake which destroyed the town of Shimoda, which had been opened as a foreign port in Japan. The Russian frigate Diana, which was lying at this place, was caught by the retreating waves, and is said to have revolved forty-three times in thirty minutes, and was so injured that she had to be abandoned.

A shock occurred on the 2d day, 10th month, 2d year of Ansei (1855), at Yedo. A retainer of Rinnoji-no-Meija, whose palace was at Uyero, gives the following experience of it. He says:

Having returned to my couch that night, but not fallen asleep, at about 10 o'clock I was startled by the *kara kami* (papered partition), near which I had laid down, falling suddenly, and without hands, upon me. The night lantern in my apartment was at the same time upset, and a fellow officer who lay near me cried out, "earthquake," which thoroughly aroused me; I got up and hurriedly attempted to dress myself. I put on my long robe and girdle, and was drawing on my hakama (loose trousers) when my companion, feeling his way after me, stepped on one leg of my trousers and tore it off. I had previously rushed into an adjoining room, and then seeing that the paper lantern by the fireplace in the floor was on fire, had seized a tea-kettle that stood near and extinquished the fire of the burning lantern, as also the live coals in the fire place. Finding that my trousers were minus a leg, I groped my way back to my room, and, snatching up another pair, put them under my arm and rushed out as fast as I could, to find a place of safety in the palace court. But the house was rocking to and fro; the plastered walls and the partitions were shaking as with a violent ague, and the plaster and boards were falling all around me. The lintels of the doors were shaken out of their fastenings and dropping on all sides. Everything upon shelves, such as clocks, crockery, or whatever it might be, was thrown down.

After describing how he saved his master, who was then over fifty years of age, he says:

I passed out of the premises to go home. As I emerged from the gate, I had an extensive view of the city, and saw flames bursting forth far and near in every quarter. When I reached the foot of the hill on which the palace stood, I found the streets utterly impassable. The roofs of the houses on both sides had fallen into them, and from beneath the *débris* the cries of men, women, and children were heard on all sides calling for assistance.

In the case of this earthquake it seems that the center of the disturbance was in or near the city. In all, 14,241 dwelling-houses and 1,649 fire-proof store-houses were overturned in the city. No official record of the number of lives that were lost is known to exist. Popular accounts give it at 200,000.

In the 3d year, Ansei (1856), a severe shock was felt at Sendai, causing great damage to property.

On the 28th day, 1st month, 1st year, Yenji (1866), Tamba and Harima were visited by a severe shock. After the first shock of a long duration there were other less severe shocks almost every hour for five days.

On the 5th day, 2d month, 5th year, Meiji (1872), a great earthquake occurred at Yuaami and Idzumo, and Hamada felt it worst, the earth opening in many places, and many lives being lost.

The records of the earthquakes during the past fifteen centuries do not justify the conclusion that the era of destructive earthquakes has passed. It is not found that they have decreased in frequency or severity. The present century has had its full quota of destructive shocks, and it is not right to assume that the country is to be exempt for the remainder of this century or during those which are to follow. The whole of the empire has been subjected more or less to shocks of earthquakes, although in different degree. The two cities of Kiôto and Yedo

appear to have suffered most, but this may be owing to the better records kept in those cities.

Regarding the distribution of earthquakes as to time, we find we have had, since the fifth century, 149 destructive earthquakes in Japan, as follows:

In fifth century	1
In sixth century	1
In seventh century	7
In eighth century	7
In ninth century	28
In tenth century	11
In eleventh century	10
In twelfth century	1
In thirteenth century	7
In fourteenth century	8
In fifteenth century	15
In sixteenth century	8
In seventeenth century	15
In eighteenth century	13
In nineteenth century	16

On an average there has been one severe earthquake in the country in every ten years. In the nineteenth century there has been one great earthquake in every five years.

Remarkable phenomena are mentioned as preceding great earthquakes, such as unusually high temperature, unusual changes in the atmosphere, luminous appearances, and magnetic disturbances, mirages, &c.

ALEXANDER C. JONES,
Consul.

CONSULATE OF THE UNITED STATES,
Nagasaki, Japan, December 29, 1881.

AGRICULTURE AND AGRICULTURAL IMPLEMENTS IN THE STRAITS SETTLEMENTS.

REPORT BY CONSUL STUDER, OF SINGAPORE.

AGRICULTURAL IMPLEMENTS AND MACHINERY.

This is a very important subject, the great field for which remains as yet dormant. The chief implement used by planters is the hoe (going by the Malay name "chankoli"); this on the Malayan peninsula, in Sumatra, Borneo, and on all the islands of the Indo-Malayan archipelago, a few sugar districts in Java, perhaps, more or less excepted.

The system of planting by Europeans and natives is the most patriarchal imaginable, viz, a great many coolies, with as many hoes.

For breaking ground, new or old, the shape of the hoes, as far as I have been able to ascertain and observe, is pretty much the same, say, on an average, about six inches wide and eight or nine inches in length, and they are nearly all made by Chinese blacksmiths and can be had very cheaply, wholesale at from 18 to 20 cents apiece. It is only of late years that some planters in Sumatra have introduced American hoes, such as our farmers generally use in their cornfields for hoeing and weeding between the tobacco plants, the native hoe having been found too large and clumsy. The coolies liked our hoes well, and for a

time there was a fair demand for them (via Penang), but, I have been told, some manufacturers in Germany and other places in Europe sent out hoes in imitation of ours at lower prices; but I am not now able to say whether, or to what degree, they have succeeded in reducing the sale of ours. I have, however, no fears that their competition will amount to much in the long run, because the planters and coolies will soon find out which, in every respect, will give the best satisfaction, for no country can beat our American corn-hoes. I tried to induce some planters of the more progressive sort to send for American grubbing hoes for breaking newly-cleared jungle soil, claiming that it was lighter, would go deeper than their "chankoli," as well as cut with ease through roots about or nearly as well as an ax. But they told me that the common Chinese hoes answered very well; that they were well hardened and tempered, and cut through roots with ease, and they added that if they introduced our grubbing hoes and the coolies liked them better, the Chinese blacksmiths would soon imitate them, and so cheap as to drive ours out of the market. I have, however, been told that coffee-planters, in places where no blacksmiths were near them, introduced grubbing hoes, but where manufactured I am unable to say, their estates being too far away.

Spades, dirt shovels, matlocks, picks, pitchforks, &c., are not imported, as far as I have been able to ascertain.

If the natives need any articles in that line, or resembling the same, the Chinese blacksmiths make them. With their common Chinese hoe, above mentioned, the coolies do all the planting, dig ditches, make excavations, and fill the baskets that serve in lieu of wheelbarrows for removing earth, débris, or stones. They carry two baskets at a time, suspended from either end of a pliable stick or bar, carried across a man's shoulders. They cannot be induced to use wheelbarrows, though it has been tried often. But for the removal of objects, too heavy for one or two men to carry for a distance, they use two-wheeled hand-carts, big, heavy, lumbering arrangements, on which they pull and push incredibly great loads.

There is not a single plantation on the Malay peninsula, or on any of the islands, big or little, of the Indo-Malayan archipelago, on which our American system of planting or farming, by using plows and other labor-saving machinery, is followed, with the exception of some districts on the island of Java, in a measure; of which I shall say more below.

The rice-planting natives (for lowland rice, and not hill rice, two distinct sorts), have an arrangement resembling a plow, made of very hard wood and pulled by buffaloes, for stirring the ground. It is simply a beam (a sapling will answer), into which a sharpened broad stick of wood, resembling a standing coulter, is inserted; the beam having simple arrangements, at either end, for guiding and pulling the implement. With this, after the rice field is covered with water, they stir and loosen the mud; whereupon the women come with bundles of rice settings, grown in seed beds, near their houses, and, armed with a sharp stick, plant a few settings to a hill, the hills being about one foot apart each way. When the crop is ripe they have neither scythes nor cradles for harvesting it, but, with a very small sickle, they cut it about two-thirds the length of stalk up from the ground, and carry it to a shed under cover. The Chinese and Siamese, in lieu of thrashing, tread it, with buffaloes, on hard clay ground.

This process separates the unhulled rice, called "paddy," from the stalks. To remove the hulls from the rice and polish the kernels, the

paddy is taken to mills or hand-machines, the latter being clumsy, hard to work, and primitive. The Land Malays, not having buffaloes, separate the paddy from the stalks by hand simply; and, as a rule, they plant no more than they need for their own use.

For the cultivation of upland rice the natives use the common hoe, breaking the soil as deep and fine as possible, and transplant their settings when the rainy season commences. This species of rice (paddy) is not quite so yielding, the kernels being a little smaller than of marsh-paddy. Hill rice is of excellent quality, but no more than a sufficiency for home consumption is planted. All plantations, as I have shown, are worked by coolies with hoes, and if the planter is advised to use plows he will simply laugh and say, "Impossible! just look at all the stumps and intricate masses of large and small roots; why, it is useless to try to break up land under such circumstances," &c., and, about "lallang fields" ("lallang," in Malay, means a species of long and very tough grass, growing very thickly and luxuriantly, but only fit for thatching roofs or for pasture after a burning) say to him, "There are no stumps and wood-roots, why don't you use a plow?" He will answer "No; but there is a mass of very tough, wire-like vegetable roots, growing down into the soil over three feet deep; a plow cannot go through that without being broken any more than through jungle-land, and to hoe it, it is worse than jungle-land."

Tracts of "lallang" are met with, mostly in the best-settled provinces, each tract indicating an abandoned rice-field or gambier or pepper plantation. Soon after cultivated land has been abandoned "lallang" grass, especially on heavy clay soil, will spring up, and so thickly that seeds blown from trees in the jungle, or carried by birds, will find no chance to take root. Not so on loamy or porous lands; on such the seeds from the timber will take root and crowd "lallang" out.

There have been a few planters, who at different times sent for plows to break up "lallang" land; but not being practical farmers or planters, they did not get the right kind; they received plows fit only for stirring old, long-cultivated free soil, instead of "prairie-breaking plows." They started a furrow with the hoe, hitched on two yokes of bullocks; it would not move; more bullocks, and plenty of shouting and whipping, and the plow would not move. It was not of the cutting kind, and fast in the tangled mass of shoe-string roots it could yield to force by breaking only. And then the plow, its manufacturer, and the country whence it came would come in for a share of "blessings" in polyglot language. After such harrowing experiences it was decidedly "unsafe" to talk to those "planters," any more about plows. About eight years ago, after a series of quiet "lectures on agriculture," I succeeded in inducing, as a matter of trial, a firm of Sumatra tobacco planters to send to the United States for a 12-inch prairie-breaking plow, with a rolling coulter, to break "lallang" land, and for a light but strong "back-string soil plow" with a strong and suitable standing coulter. After both arrived in excellent order, I saw them put together, and took much trouble to explain to them how to use and guide those plows.

They never used either of the plows mentioned, and gave me a wide berth whenever afterwards they came to Singapore. Three years ago they had the same two plows still "preserved" in the box in which they came, but I was told that they were not for sale.

Next, I turned my attention to the Chinese, who are practical planters. To do this right I concluded I must see a leading "towkay," a pillar among them. I saw him, and pointed out to him how much more successful

his countrymen would be if they were less conservative in their modes of developing new country, by the introduction and use of labor-saving machinery. I spoke about using plows, pointing out that on the island of Singapore and on the peninsula there were many thousands of acres free from stumps and roots, in which plows could be used without trouble, under proper management. He paid great attention to all I told him, asked many questions, and admitted he knew I was right, but expressed a fear that, through an extensive introduction of labor-saving machinery and implements, many coolies would be thrown out of employment and might become depraved, as well as persecute those using the same. I replied that at first this might appear so, but the result would be a different one, that more land would be planted, more industry and enterprise generated, and that all who wished would find employment. He regretted that none of the European planters introduced such implements and machinery, through which the Chinese would get new ideas, and then follow them as enterprises.

In all of this I heartily agreed with him, and expressed an opinion that Americans (if any would come) would have to become the pioneers, as well as the wish that our manufacturers of machinery and implements would send agents with implements and machines to demonstrate practically how to use the same, &c.

One day he told me he had a piece of land adjoining his homestead which had been partially grubbed and cultivated, but still contained small roots; that he thought he would send for a plow and follow my advice, hoping that others would follow his example, and asked me what kind of a plow he would need. This being answered, he requested me to get him one, and as a matter of courtesy I did send for it, and asked the manufacturer to send a first-class one; that it might prove the forerunner of a good trade. When it arrived I went to my Celestial friend's place and helped to put it together, and affix the coulter. When it stood there ready for use he sent for many of his Chinese friends, and they examined it, walked around it, asked many questions, shook their heads gravely, and pronounced it "a very ingenious machine," the like of which they had never seen before. The plow had an ovation.

I told the owner to procure a good, even-pulling, heavy pair of bullocks with a yoke, and in the absence of a plow-chain to buy a piece of stout manila rope of suitable length, and, when ready, to send me word and I would go and direct his men how to use the plow, or plow a few furrows myself, to teach them all the better. The plow was an excellent one, and well suited for his land. I kept waiting for weeks and months for his request "to start plowing," but it never came. Meeting him occasionally, I asked him had he the yoke of bullocks and rope. "No," he always said; "but I will not put it off any longer," &c. I heard that he had hired several yokes of bullocks, but none suited him. This, however, he never told me. One day he drove up to the consulate in his palanquin, bringing with him a beautiful bouquet of the choicest flowers, as he often did, presenting it with many bows and smiles and the most polite of terms.

Chatting a little while with him, he turned the conversation and said: "My men don't know anything about a plow—don't know how to use it; neither do I know any more about it than they do; but if I was younger I might try and make it go." And after a pause, with a good-natured twinkle in his eye, he continued: "I hold that plow for the first American that will come here to use one. I will make him a present of it with much pleasure." I answered I should be only too happy to accept the offer, and, thanking him, requested him to cause the plow to be well

oiled to prevent it from getting rust-eaten; as well as expressed a belief that some one would turn up to claim it. He explained that he was unable to find a single suitable pair of bullocks that would pull the plow, even in loose ground; that he had tried a number, even such as had been well broken in to pull heavily-loaded carts, and that, perhaps, his inexperienced men did not take hold or manage the matter properly. At any rate, he could do nothing with the plow. Again I offered to go to his place and try to make it go if he would procure a well-broken yoke of cart bullocks, with their driver. But he would not have me do so, on the ground that no "white gentleman" should do such things in the presence of natives. To this I replied that in my country a great many thousands of "white gentlemen" would plow all day and many days, and feel proud over their labor, as well as benefit themselves and their country. But for that fact, I explained to him, America would never have been what she is to-day, &c. He died since, the good man, and is greatly missed.

I came to the conclusion, thinking it all over, that he would have made that plow go, that he knew well enough the great advantage of it, but that he was afraid of loading upon himself the ill-will of a great number of Chinese coolies, who made their living by planting with hoes. That was a mistaken idea, because already then, and much more so now, a sufficient number of coolies could not and cannot be had to meet the demands of planters. I shall come to that more explicitly below.

I tried in another way to lay a foundation for a demand of plows, agricultural implements, and labor-saving machinery generally, and in this the colonial government, without being aware of it, offered me an opportunity. It occurred as follows:

Many of our readers of papers heard of the dreadful famines in Upper India in 1877, in consequence of the general failure of the rice crop, which was caused by a very short rainy season. In some of the Malayan states under British rule on the peninsula (also in Java) the rice crop was a failure, in the large and magnificent province of Pérak especially, and for more than one year and from various causes. That province in 1875 had mutinied against its rulers, and a war, as well as rigorous measures for the arrest and surveillance of disaffected Malays, were the consequences.

In 1876 the province was in an unsettled state, and comparatively little rice was planted, and some of that did not turn out well. Though, on the peninsula, people have not to depend on a special rainy season, having more or less rain at intervals throughout the year, and if their rice fails, the country at large in its luxuriance and their rivers and bays with plenty of fine fish offer them substitutes in sufficiency, so they need not starve to death if they are not too indolent to go after or earn their food; besides, the great rice granaries of Siam and Cochin China are too near and easily reached by direct water communication to make such famines as have taken place in Upper India possible. There was, however, and nevertheless, much suffering and despondency that year, 1876, in Pérak. In 1877 there was more rice planted, peace and quiet having in a measure been restored, but the crops failed on many fields from various causes, a species of very destructive jungle rat among them, and then there was really much suffering, all the more as there was little or no money in the province. The British Government at this juncture sent thither a "Resident," which means a representative of the government to act in the capacity of general supervisor and advisor to the native ruler and his government, who was exceptionally well qualified, being willing to work hard and study the best

interests of the country, and who thoroughly understood the character, usages, &c., of the inhabitants.

Seeing all this suffering and discouragement among the people at large, he concluded to induce the people to plant corn (maize) besides rice; and though a species of poor corn had always been planted in small patches, by Malays, here and there about the peninsula, he concluded to try new seeds, different varieties from abroad, to introduce small corn-mills (corn meal had never been used by the natives—was unknown to them) and induce the people to live on corn as well as on rice. As a result, the colonial government entered into correspondence with me, asking for information about corn-mills and the best methods of planting corn, &c. I entered upon the subject heartily, wrote a treatise upon "corn-planting" for the governor and gave them information, and advice when and wherever required.

Upon the request of the Resident of Pérak, through the colonial government, I also obtained from Iowa, my State, a pretty large quantity of well-selected seed-corn of various varieties for Pérak, and some for myself, for issue to any one gratis, who wished to try planting the same in earnest. I had on a former occasion obtained a small quantity of seed-corn from home, which I issued to various planters, and which grew luxuriantly. A Resident of another province, Sungi Ujong by name, also obtained seeds from me, and he reported to me glowing accounts of the success in corn-planting, where properly attended. The Resident of Pérak, his province being much larger than Sungi Ujong, reported that certain species succeeded well on some lands and not so well, or not at all, on others, hill lands especially.

Sweet corn, he reported, was a great success generally, but other species (meal-grain) in reality only on good bottom lands, where properly cultivated. Later on he reported that in remote districts, industrious natives met with good success. I issued seed-corn to many people in many provinces, as well as in Sumatra and other parts of Dutch India, and "Iowa corn" is now growing in many directions, for hundreds of miles around Singapore.

A. G. STUDER,
Consul.

UNITED STATES CONSULATE,
Singapore Straits Settlements.

THE LABOR QUESTION IN THE STRAITS SETTLEMENTS.

REPORT BY CONSUL STUDER, OF SINGAPORE.

The greatest portion by far of the Malay provinces under British rule is thinly settled by natives, their settlements or villages being chiefly found along the river-courses, while the bulk of the country back of the coast and between navigable rivers is one vast, forest-covered country, called "jungle." The word "jungle" does not mean land covered with scattering timber, brush, undergrowth, or canebrake, as I found many people in our country to opine, but it means forest, with all the indigenous flora in it. Under gigantic trees, other trees, different species, rear their crowns, such as are noted for volume and heavy, dense foliage, rather than height, and between them all there is an undergrowth, an intricate mass of shrubs, vines, creepers, orchids, ferns, huge and tiny, and grasses *ad infinitum*. It is impossible for one who

has not seen a real jungle to form a correct idea of it; our heaviest virgin timber in America can bear no comparison to it. To develop such a country as that, a government should be more than willing to give people willing to grapple with it every possible encouragement and protection; and this, I regret to say, is not the case, nor are the laws for acquiring public lands wise or liberal. And behind it all is the lurking suspicion, as regards white people (not British), that, if settling in the Malay states, they might disaffect, or lead to disaffection, the natives against their government.

In spite of expensive leases of crown lands for a term of ninety-nine years or less, so much per acre payable in advance and the rest on terms, and, in addition to that, annual ground rents, payable in advance (or lose the land), with the right to mine minerals, quarry stone on and sell timber from the land, &c., reserved by the government, the Chinese, principally on this island and on the peninsula of Malacca, have been the planters of gambier, pepper, and tapioca, while the Malays planted, as a rule, rice only.

There were but few European planters, planting sugar and tapioca in province Wellesley, rarely in other Malay provinces, and a very few on this island. They had different land laws in different Malay provinces, all more or less exacting, and these have been changed in various ways, but not to make them easier by any means.

To within about six or seven years ago a sufficient number of Coolies arrived annually from China to meet the demands of planters, European and Chinese, as well as of the tobacco planters in Deli and neighboring places in Sumatra, which latter, as a rule, were in the habit of coming here and to Penang to hire coolies. Deli tobacco (cigar wrapping of excellent quality) selling for big prices in Europe, the result was that many new comers went there, as time wore on, to plant tobacco, and as a result the demand for coolies increased rapidly, and as their numbers were not equal to the demand various dishonorable and even infamous methods were resorted to for obtaining them.

Planters looking for coolies employed so-called "coolie brokers," themselves Chinamen, to procure and put on board of vessels the desired number of coolies, paying them so much per head for every coolie and a certain amount of advance wages for each.

Coolies were crimped from estates in this colony (*i. e.*, for a consideration induced to leave their places clandestinely); some were kidnaped or locked up in houses, and thence taken forcibly (secretly, of course) on vessels, or, unsuspicious, they were induced, in various ways, to enter certain dens, and once inside, they were kept in durance until they could by stealth be sent off on vessels. On the other hand, vessels under various flags and Chinese junks arrived in the colony in an overcrowded state, the coolies being often packed like herrings, and so many inhumanities and abuses occurred, so many lives were lost by drowning or from diseases contracted on board, for which rarely any one was called to account, as to evoke expressions of indignation from all fair-minded and humane people. This abominable traffic had just reached its zenith, when the colonial government stepped in and took vigorous measures to check it, by regulating the number of coolie passengers for each vessel, in proportion to her registered tonnage, on all such vessels arriving in the colony, and by punishing severely such masters as carried coolies in excess of the lawful number.

The rule had been, when hiring coolies for plantations or other enterprises in the colony, to pay them a certain amount of advance wages, say, for one or two months, and, as a consequence, very often, when they were crimped from employers or they deserted when still in debt, the

employer that hired them lost advances paid, found his enterprise interrupted, and was obliged to look for new hands at a heavy expense. To stop as much as possible abuses on that score the colonial legislature passed two bills, one called the "crimping bill," making crimping or kidnapping coolies a high offense, and the "Chinese emigrant protecting bill." Under the latter all Chinese emigrants arriving here are landed at a certain place, where people can go and hire them under the supervision of a commissioner. A contract in writing for each cooly, containing all the stipulations, is drawn up in triplicate, both parties to the agreement being "well and truly bound." The fees and advances having been paid, the coolies are allowed to leave the emigrant depot, while such as have not been hired, and not claiming the commissioner's protection any further on any account, are allowed to go whither they like.

If a planter fails to carry out his contract or ill treats the cooly the latter can prosecute him. If, on the other hand, the cooly deserts his employer before expiration of contract, the latter can have him arrested and returned on the estate, and if it is found that the cooly deserted while in debt to his employer, he is sent to jail and set to work for a certain time, and the employer can receive from the authorities the amount due him at the time of desertion of the cooly.

Now, this bill, with its provisions, looks very favorably on first appearance, but is far from being a popular one, for various reasons.

Sometimes, immediately after having received advance wages, the coolies find a way of disappearing, and as they cannot be punished before they are found and arrested, and since to find them among hundreds upon thousands of Celestials in city, country, and jungle is easier said than done, there is not much satisfaction in that. But, if successfully brought to a plantation, they work for a while and then desert, taking to the jungle, or biding among countrymen and natives, and the planter does not find much protection in that. He may hear of them as being at a remote place, generally many miles away from a town having a police magistrate or prison, and to catch them and transport them, aside from dangers, is so expensive and full of hinderances, that the planter prefers often to let him or them be where they are.

It is to white planters I am alluding chiefly, because Chinese "towkays," owing to being countrymen, or belonging to the same Chinese factions or secret societies, do not often lose coolies; neither, as a rule, do they like the "Chinese emigrant protection measure," because they can get coolies where a white man would fail, and this without paying "official fees," and signing a mountain of agreements in triplicate. And as all planters must rely chiefly on Chinese coolies, it is evident that the Chinese "towkay" has every advantage over the white planter. The number of "towkays" is steadily increasing, and with them their influence, wealth, and power in the colony!

On the plantation the white planter is more slave to his coolies than he is master. If working by the day, unless under a sharp overseer (and then they run away), they work only nominally; but some of them will work well upon contract, when they see any prospect of gaining by it, or a chance to steal or cheat. Many of them are opium smokers, and nearly all gamblers. The planter must not only supply them liberally with rice, fish, curry stuff, oil, tobacco, &c., but also with enough of opium so that they can have a daily smoke. If his stock of the vile drug gives out, and he be at a distance from the nearest market, they will not work until a fresh stock arrives. And the worst is, opium being very dear, that these miserable smokers rarely get out of debt with the planter. They have to be watched, not only by day, but also by night. If overseers

do not go into their sheds at night and see the lights put out, they will sit up and gamble and be too sleepy to work properly next day. Just to think of a herd of coolies of about 300 to 500 on one estate! Great tact and discretion is required in overseeing and managing them, and when they dislike their employers or overseers, they often form secret plots to murder them, and close inspections of their sheds are often required to see whether they have sharpened sticks or other weapons concealed.

In order to be informed of plots the planters generally have secret reporters, one to every shed, who, under the character of cooly laborers, receiving secretly extra wages, are relied on to report at headquarters everything that seems wrong.

It is dangerous to neglect watchfulness, for many planters and overseers have been either murdered or badly handled since I have been here.

Even on the coast of Pérak a British assistant resident, against whom, not his, but neighboring coolies held a grudge, was murdered in cold blood.

It happened that a few years ago, in Ceylon, a coffee-leaf disease spread among all the plantations so damaging in its results as to induce many planters, all British subjects, to leave their estates and seek new lands elsewhere. Many of them, within the last two or three years, came to the peninsula and found what seemed to them excellent high lands for coffee, cinchona, and tea cultivation in the interior of Pérak, Sungi Ujong, and Jahore, and secured the same. There were also moneyed men from Europe, England chiefly, who, attracted by the glowing accounts of the resources of the peninsula, came to create plantations in various places. Some of them started vigorously, but those in the remote mountain districts of Pérak found great difficulty and heavy expenses in procuring enough of coolies, notwithstanding that the salubrity of the climate of that district was not questioned. Not so in Jahore; just north of Singapore is land on the peninsula, where also several estates were started almost simultaneously. There, in the beginning, owing to the vicinity of Singapore, no particular difficulty was experienced in obtaining coolies and Malays to clear the dense virgin jungle. But soon the whole locality, hills, and valleys, was found to be virtually poisoned with malaria, and the water, so I was informed, also unhealthy. The mortality among the laborers clearing jungle, cutting roads, and otherwise employed was something astounding, and, according to reports, worse by times than an epidemic. An overseer, a reliable man, who had taken a contract to cut a road through the jungle, told me himself that of 100 coolies employed all but 19 died, and this in a comparatively short time.

The enterprise, however, was not abandoned, and all that could be done was done to hush up the true state of affairs, in order not to discourage ignorant coolies from coming. But as it is impossible to prevent water from running through a sieve, the startling news spread fast enough, and the enterprise was retarded, though they still managed "by hook or crook" to get some coolies. Notwithstanding these grave difficulties, I am informed that on two high eminences a pretty large area has been planted with coffee, and that the young trees are looking well; also, that much more has been planted in Pérak and Sungi Ujong with still better promises.

A. G. STUDER,
Consul.

UNITED STATES CONSULATE,
Singapore, Straits Settlements.

PROJECT OF NEW GENERAL AUSTRIAN TARIFF LAW.

REPORT BY CONSUL-GENERAL WEAVER, OF VIENNA.

Referring to my dispatch No. 209, under date of 17th February last, relative to the proposed new general tariff law of entry duties, as presented to the Austrian Reichsrath, February 15, by the minister of finances and commerce, I beg to recur to the same subject for the purpose of transmitting certain considerations in regard thereto which may be of special interest at the present time, in view of the general discussion carried on in the United States in regard to the readjustment of our entry duties.

As you are aware the introduction of revenue bills into the houses of legislature in this empire is a prerogative of the minister of finances, in connection with one or more of his ministerial colleagues, to whose department the subject under consideration appertains; as, for example, the modification of entry duties falls within the province of the minister of finances and the minister of commerce, and, consequently, these ministers are charged with the preparation of the proposed law. An idea of the thoroughness with which they enter upon their task may be seen from the following brief outline of some of the details which have come to light relative to the present effort to revise the tariff. More than a year ago circulars were prepared and issued to the chambers of commerce, industrial societies, and prominent manufacturers of the entire realm, embracing a vast number of interrogatories pertinent to the question in hand, such as the quantity of material, foreign and domestic, employed; amount manufactured, sold and exported, compared with former years; number of, and wages paid to, laborers; freights to the principal markets and the ports of the seaboard; prices paid for raw material and manufactured articles; the effect of existing tariff laws, and such modifications as might be suggested for development of industry and trade. The amount of data obtained from private individuals was not generally made public, but the discussion carried on in the chambers of commerce, industrial and other societies was extensively published, while numerous petitions and counter-petitions were signed and presented for consideration to the proper officials by parties of various conflicting interests. From the mass of statistical material and general information thus brought together, the project of law had to be evolved, harmonizing, as far as possible, the varied interests of all and the exigencies of states' exchequer, which, it may be very readily imagined, was quite a Herculean task.

On their presentation to the Reichsrath the project of law with a classified tariff list, embracing 357 separate categories comprising 50 tariff classes, was accompanied by an exhaustive "Motivenbericht," embracing the history of tariff legislation, the statistics of imports and exports, and other pertinent matter in regard to the principal classes or articles of production, manufacture, and commerce; thus supplying in an admirable degree all the necessary information required for careful legislation. Then follows a tabular statement of amount of duties collected on the principal articles producing revenue by virtue of existing laws and conventional tariffs, likewise estimates as to effect of the proposed law, carried out in detail to the furthest possible limit. Furthermore, a comparative tariff list of present and proposed duties, carefully and ex-

tensively compared with the existing German tariff, the whole constituting an octavo volume of about 300 pages, containing an admirable and exhaustive presentation of the historical and statistical data relative to the subject-matter under discussion.

From a hasty review of the "Motivenbericht" one can readily see that the object of the new project is twofold: first, to procure the largest possible amount of revenue (which at present is an urgent necessity) at the least sacrifice and burden to the people and trade of the empire; and, second, to protect home industries and interests by so increasing the duties on certain importations, especially on those from the United States and Russia, that the home markets may be conserved for home manufacturers. In this connection special reference is made to the invasion of Western Europe by American grain and pork to the end that these markets are forever lost to Austro-Hungarian cereals and meats; that being no longer capable of resisting American competition in these foreign markets, self-protection demands that home markets should be reserved for domestic trade, particularly so in regard to grain, canned goods, meats, lard, leather, sewing-machines, agricultural implements, domestic utensils, cotton yarns and textiles, and refined petroleum; or, in general, while raw materials for industrial purposes will be admitted free, articles for food and manufactured goods will be forced to pay still higher entry duties.

Although not called upon to express a personal opinion in regard to the respective merits of a protective tariff or free trade, yet I cannot allow the present opportunity to pass without remarking that an industrial nation like Austria or Germany, dependent for success on foreign markets for an outlet to her surplus manufactures, rather than on domestic consumption, cannot reasonably hope to reap the same benefit from a protective tariff as might a young, undeveloped country of inexhaustible resources, vast domains, and millions of inhabitants relatively independent of foreign markets; and doubts may be safely expressed whether Germany, whose lead Austria is undoubtedly following, or any other European nation, may, by means of her protective tariff laws, reap such benefits as are anticipated, or which are commensurate with the extra burdens thereby imposed on the laboring and consuming classes.

But Austria is fully committed to the experiment; and from the discussions and conclusions reached in the legislative committees, to whom the project has been submitted for preliminary examination, there can be no doubt as to the final result, for, notwithstanding the vigorous opposition of the minority, the bill will undoubtedly pass both houses of the Reichsrath, and enter into force at as early day; so that our people may prepare themselves to act in accordance with the exigencies of a *fait accompli*.

At the earliest practicable moment after the final passage of the bill I shall transmit a translation of a full text and its accompanying classified tariff-list of articles and the duties thereon imposed.

JAMES RILEY WEAVER,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
Vienna, April 22, 1882.

THE AUSTRO-HUNGARIAN TARIFF.

REPORT BY CONSUL-GENERAL WEAVER, OF VIENNA.

Referring to my dispatch, No. 235, transmitting duplicate copies in the original text of the new general tariff law of Austria-Hungary, which was proclaimed on the 28th ultimo, and which went into operation 1st instant, I have now to inform you that a careful translation of the complete law and tariff has this day been forwarded to the department by direct mail under separate cover for publication if deemed of sufficient importance.

As was pointed out in my dispatch, No. 209, the changes established by the new law are material, constituting, in many instances, an enormous increase of duties, partly as a protection to home industries, but more generally for increase of revenue.

The various changes can be seen by comparing the new tariff with the former one of June 27, 1878, published in our Commercial Relations for 1878, pp. 127–140. The rates of tare in the new law have likewise been modified in certain instances, but the changes are not deemed of sufficient importance to warrant a translation and publication different from that which appears on pp. 140–144 of Commercial Relations of 1878.

JAMES RILEY WEAVER,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
Vienna, June 17, 1882.

Law of May 25, 1882, *regarding the general customs tariff of the Austro-Hungarian customs district.*

With the consent of both houses of my Parliament, I decree as follows:

ARTICLE I. The provisions of this law are valid through the general customs and trade districts of the Austro-Hungarian Empire, but do not apply to the districts exempt from customs duties.

ART. II. All goods imported are dutiable unless expressly declared free of duty, and are subject to those duties which are prescribed in the accompanying customs tariff on imports, according to the class to which the goods belong. Where it is not expressly stated otherwise in the tariff, articles of consumption are also to pay, according to legal regulations, the internal, state, province, or city tax and additional expenses.

For goods *in transitu* no duty is to be collected.

An export duty is only to be paid on such goods as are specified in the customs tariff on exports.

ART. III. Goods coming from countries which treat Austrian and Hungarian vessels or goods of Austrian and Hungarian origin with less favor than the vessels or goods of other nations, are subject on entering to an additional payment of 30 per cent., and if the tariff declares them to be free, then a special ad valorem duty of 15 per cent. will be levied upon them.

The government has a right to make exceptions from this rule and either apply it to certain categories of goods, or classify the categories of goods under a higher or lower tariff.

ART. IV. An alphabetical list of goods to be published will determine the detailed arrangement of each article in the proper class of the customs tariff according to their letter and spirit. In cases of necessity the same may be revised and corrected.

Chemical products entering for the first time into commerce, or paying by virtue of tariff number 331 a duty exceeding 15 per cent. ad valorem, may be classified under

another tariff number, according, to their composition and use or according to their value.

The publication of this list of goods and its supplement in the countries represented in the Reichsrath may, contrary to the law of June 10, 1869 (R. G. B., No. 133), be limited to an issue of the list of articles and its supplement in the Reichsgesetzblatt.

ART. V. Goods composed of different stuffs, not belonging to fancy articles, or otherwise specially provided for (tariff number 307–316) the parts composing belonging to different tariff classes, will be taxed according to the main material composing the goods, and in case this be doubtful, to that material which in the tariff pays a higher duty. Articles composed of materials variously taxed will, if the materials are not specially classified in the tariff, be taxed like that component which in the tariff pays a higher duty, provided the material is not represented in too insignificant quantities. More detailed instructions will follow.

ART. VI. The import and the transit of articles forming a monopoly of the state (salt, powder, tobacco, and manufactures of tobacco) can take place only by permit of the competent authority. The government has a right to limit the transit of certain goods for reasons of public health or public safety. For the present the existing laws regulating this traffic remain in force.

ART. VII. In case of bad harvests at home, the government has the right to abrogate temporarily the duties on all or certain kinds of grain and leguminous plants; on all or certain frontiers under protective control and restriction.

ART. VIII. From the payment of import duties are free:

1. Articles intended for the immediate use of the Emperor.

2. Articles intended for the immediate use of diplomatic persons accredited to the imperial and royal court, according to special orders.

3. Tobacco leaves for the government manufactories; also, salt, gunpowder, and manufactures of tobacco for the government stores, or purchased by inhabitants of the exempted customs districts from places of sale in the exempted customs districts.

4. Results of government mining from the imperial and royal sale-factory at Trieste.

5. Military effects, such as uniforms, armor, weapons, munitions, army baggage (in which are included bed-fixtures, medical and hospital requisites), also horses in use between bodies of troops, or naval establishments in and out of the customs district; blasting materials and explosives for the military technical experiments of the army.

6. Official requisites sent by government authorities from the exempted customs districts into the customs districts.

7. Effects of emigrants from foreign countries, and from the exempted customs districts into the customs districts; also machines and parts of machines; manufacturing implements and tools of the same, if these articles are intended for their own use and are adapted to their own circumstances and bear traces of continuous use.

The dower of persons who, on account of their marriage, move into the customs district, so far as they are adapted to their circumstances.

From this exemption from duties are excluded all articles of consumption, cattle, dry goods not made up, and raw stuffs.

8. Inheritances; furniture, house, table, and kitchen articles, clothing, underclothes, bed and table linen; implements in use; tools in use, &c., so far as they are for the inheritor's use and are adapted to his or her circumstances.

Articles enumerated under No. 7, paragraph 3, are excluded from the free entry.

9. Objects of art and science intended for collections of public, scientific, and art institutes, works of Austrian and Hungarian artists staying in foreign countries.

10. Anatomical preparations, skeletons, and corpses.

11. Antiquities, when there is no doubt that their value lies essentially in their age, and that they are adapted to no other purpose and use than for a collection.

12. Objects disposed of judicially.

13. Decorations and exhibition medals which have been conferred.

The formalities to be observed regarding No. 1, as well as the necessary proofs to be furnished and conditions to be fulfilled respecting the rest, will be made public at some future time. For the present the existing regulations continue in force.

ART. IX. Also to be entered free of duty:

1. Travelers' effects, as linen, clothing, bedding, traveling requisites, gold and silver service, and other valuables, mechanics' tools, as well as artists' implements and instruments, teamsters' and fishers' clothing and linen, books, food, medicine for use on the journey, tobacco, according to the prescribed amount (at present not more than 35 grams or 10 cigars), if intended for the personal use of the traveler, and in their nature and amount are adapted to his or her need, condition, and station.

Household furniture and articles for furnishing a house, which have been in use, belonging to travelers or persons in public service, may be entered free if they intend to reside more than one year in Austria-Hungary, and this intention is satisfactorily proved.

The same privilege may also be granted to the natives of the country, who, after an absence of more than one year, return into the customs district.

2. Means of transport, as travelers' carriages, vehicles for the transportation of persons or property, sleighs and wheelbarrows, panniers, dossers, and similar contrivances for carrying loads, the necessary horses and beasts of burden, and vessels (including their inventoried property, if the vessels belong to foreigners, or if domestic vessels, have the same or similar inventoried property as when they sailed), provided that the carriages show plainly marks of use, and that the persons and goods transported, the place of destination, the direction, the means of transportation, and the nature of the transport show them to be only for the conveyance of persons or property, and that the journey is not undertaken for the purpose of entering vehicles free of duty.

3. Provisions for ships entering and clearing, including the beer for use on board of the vessels navigating the Danube.

4. Sample cards and patterns cut out, or samples which are only intended for use as such; but all samples of edibles or tobacco are excluded.

5. Covers and cases in which dutiable goods are packed, except in the following cases:

a. When they exceed the tare allowed to the goods.

b. If goods have cases and wrappers in which they are not usually packed, and which are worth more than the goods themselves.

6. All goods which weigh less than 25 grams, or when the duty is less than 2 kreuzers. In cases of abuse, this privilege may be withdrawn temporarily from persons or certain districts.

7. Goods which have been completely destroyed in the government stores. In case they are only damaged, so far as their original use is concerned, as wine, which may be used for vinegar, the competent financial authorities may allow a proper reduction of duty. The exemption from paying duty or reduction may also be granted when the goods have already passed the post-office and have been damaged before they reached the person to whom they were addressed. More detailed regulations will be published.

ART. X. The following are also free from importation duties:

1. Articles necessary for building and equipping ships, according to the law of March 30, 1873.

2. Goods and articles imported to be improved, repaired, or finished, may be entered in the customs district, provided that the re-export of the improved, repaired, or finished goods and articles shall take place within a period of time set by the financial authorities, and that the identity between the imported and re-exported goods can be proved.

3. Goods and articles which are exported into the districts exempt from customs to be improved, repaired, or finished, and are reimported into the customs district from the exempted districts, improved, repaired, or finished, upon the conditions prescribed under 2.

4. Goods, articles of consumption excepted, which are exported from the customs district to foreign markets or fairs, or in cases of uncertain sale, which are brought back unsold.

The measures of control in relation to these privileges (1 to 4) will be regulated by ordinances.

Goods which were sent for sale to foreign countries, and, on account of unforeseen hinderances, return unsold without having been offered for sale there, may be re-entered free by special permission of the competent financial authorities. If, however, it undoubtedly appears from manufacturers' marks or stamps attached, or in default of these from the outer appearance of the goods that they are a product of the Austro-Hungarian customs territory returned from abroad, with duly-authenticated identity, a re-entry free from duty may be granted even if the goods, while abroad, were in free circulation.

Articles intended for exhibition, as well as objects to be used in experiments in public institutes, or temporarily for the benefit of the public, may be entered free when declared on entering to be intended for re-export.

The measures for the control regarding transportation facilities will be published in due time.

ART. XI. On the frontier are free of duty: The agricultural traffic upon the estates intersected by the customs frontier; cattle and farming implements belonging thereto, as well as seed for agriculture; products of agriculture, and young cattle.

Cattle which go over to and return from pasture or work, including the products gained during pasture, such as butter, cheese, and the young cattle grown up in the mean time.

ART. XII. On bringing trustworthy proof of the existing facts, the chief authority may allow the importation of the following articles, free of duty, or at reduced rates:

1. Objects used for divine service in churches and temples of different religions, as well as the material for building and constructing such churches and temples.

2. Provisions, clothing, and building material sent to people who by fire or other

destructive elements became sufferers and receive those goods as donations or as a means to rebuild their dwellings.

3. Old articles, bearing proof of having been worn, sent as gifts to poor people from abroad.

ART. XIII. The government has the right of free importation of railway material for the construction of an international frontier railway depot agreed upon by a joint committee of railway companies.

a. For all materials necessary for the construction of the building and fitting up the frontier depot, as well as the branch lines between it and the customs frontier; for furniture, and other articles, so far as under the agreement it is incumbent upon the foreign authorities to furnish them.

b. For everything necessary for carrying on the business of the foreign railway; for the rolling-stock, implements, and materials necessary for the service of the foreign frontier offices, in sufficient quantity for the purpose.

c. For the movable effects, as well as the utensils of service of the officials and employés of the foreign railway stationed in the customs district, and other persons employed by the administration of the neighboring state.

ART. XIV. All duties contained in the tariff, including dues for weighing, seals, and stamps, must be paid in gold. Special orders will direct where payments in silver may be made.

The rate of exchange to be paid will be governed by the premium on gold during the month preceding, and will be made public from month to month, as well as the rate of the value in florins at which foreign and domestic gold coins will be accepted in payment for duties.

ART. XV. Whenfractions of a kreuzer result in calculating duties, those below half a kreuzer will be diaregarded, and those of one-half kreuzer or more will be regarded as a whole kreuzer.

ART. XVI. Besides the rates to be paid by every article as given in the tariff opposite its respective number (stamp, octroi, and other duties), the following additional duties will be levied:

1. Charges for weighing, 5 kreuzers for 100 kilograms of the gross weight of those goods which are weighed by order of the authorities, or private parties.

For ascertaining the weight by calculation, for trial weighing, and for weighing with a private scale, as, for example, at the railway stations, no charge for weighing is to be made.

When the total weight of the goods amounts to less than 50 kilograms, 3 kreuzers must be paid for weighing.

In calculating the weighing-tax, weights under 50 kilograms will not be regarded; 50 kilograms and over are reckoned as 100 kilograms.

2. For every lead seal the tax is 2 kreuzers, and 1 kreuzer for every wax seal.

Goods in transit with bill of lading are exempt from paying seal money; nor is there any tax to be paid for putting the seal on the hatchway of a vessel, on railway cars, &c.

3. A tax of 10 kreuzers for the permit to enter foreign goods not dutiable.

When goods originally in transit are subsequently declared as goods for entry, the respective additional duties will be paid after the declaration is made. In internal and in control manipulations neither stamping nor sealing tax is to be paid.

4. Storage for goods in government warehouses is regulated according to local and other conditions, commonly not above 1.6 kreuzers for 100 kilograms of gross weight per day.

In cases of extraordinary accumulation of goods, the tax for storage may be raised to 2.4 kreuzers for 100 kilograms per day.

Regarding the remuneration for official services performed outside the office, the taxes for the conduct of goods, and the special water, harbor, and navigation taxes, the existing regulations remain in force.

Respecting the payment of fractional kreuzers, the provisions of Article XV will be in force.

ART. XVII. The fixing and altering of the tare in regard to the manner of packing and their different relative weights will be regulated by special law. In goods that pay not more than 3 florins for 100 kilograms, as well as in the immediate inclosures of liquids, no deduction of tare takes place, unless otherwise provided for. To liquids, however, the duty on which is calculated by the gross weight, when imported in vehicles of transportation by land or water, specially built for their transport and without any other inclosure, must be added the tare resulting from the net weight of the ordinary manner of packing.

ART. XVIII. This law, except the provisions of tariff class 21, will take effect June 1, 1882.

The law of June 27, 1878, respecting the general customs tariff of Austria-Hungary, as well as all the regulations in connection with it being in contradiction to the new

law (except regulations regarding tariff, *post*, 28*d*), will, on that day, cease to be in force.

The day on which the regulations respecting tariff class XXI will take effect will be made known by the law in reference to the increase of import duty and the levying of a tax on mineral oil.

ART. XIX. With the execution of this law are intrusted the ministers of finance and of commerce.

Schönbrunn, May 25, 1882.

FRANZ JOSEPH.

TAAPPE,
DUNAJEWSKI,
PINO.

General tariff of the customs district of Austria-Hungary.

SUMMARY.

PART I, IMPORTS.

Tariff class.		Tariff numbers.
I.	Tropical fruit	1–3
II.	Spices	4–8
III.	Southern fruit	9–16
IV.	Sugar	17–20
V.	Tobacco	21–22
VI.	Grain and legumes; flour and products of flour; rice	23–28
VII.	Vegetables, fruit, plants, and parts of plants	29–38
VIII.	Cattle and draught animals	39–49
IX.	Other animals	50–53
X.	Animal products	54–64
XI.	Grease	65–71
XII.	Fat oils	72–74
XIII.	Beverages	75–79
XIV.	Edibles	80–93
XV.	Wood, coal, and turf	94–96
XVI.	Turners and carvers' material	97–101
XVII.	Minerals	102–103
XVIII.	Drugs and perfumery stuffs	104–108
XIX.	Dyeing and tanning stuffs	109–113
XX.	Gum and resin	114–118
XXI.	Mineral oil	119–121
XXII.	Cotton yarn and goods of the same	122–135
XXIII.	Flax, hemp, jute, and other vegetable materials not specially named; spinning material; yarn and goods made therefrom	136–151
XXIV.	Wool, woolen yarn, and woolen goods	152–162
XXV.	Silk and silk goods	163–170
XXVI.	Clothing, linen, and articles of dress	171–176
XXVII.	Brush and sievemakers' goods	177–179
XXVIII.	Straw and bark goods	180–184
XXIX.	Paper and paper goods	185–196
XXX.	India rubber, gutta percha, and goods made therefrom	197–207
XXXI.	Wax-cloth and wax-silk	208–212
XXXII.	Leather and leather goods	213–219
XXXIII.	Furriers' goods	220, 221
XXXIV.	Wooden and bone ware	222–230
XXXV.	Glass and glassware	231–243
XXXVI.	Stoneware	244–248
XXXVII.	Clayware	249–256
XXXVIII.	Iron and hardware	257–272
XXXIX.	Base metals and goods made therefrom	273–281
XL.	Machines and parts of machinery	282–287
XLI.	Vehicles of transportation	288–295
XLII.	Precious metals and coins	296–297
XLIII.	Instruments, watches, and fancy goods	298–316
XLIV.	Salt	317
XLV.	Chemical auxiliary stuffs	318–324
XLVI.	Chemical products, colors, medicines, and perfumeries	325–337
XLVII.	Candles and soap	338–342
XLVIII.	Explosive material	343–347
XLIX.	Objects of art and literature	348–352
L.	Refuse	353–356

PART II, EXPORT.

Rags and other refuse for the manufacture of paper	357

[Unless where specifically mentioned otherwise, the rates throughout this tariff are for 100 kilograms.]

PART I, IMPORT.

I.—*Tropical fruit.*

[Per 100 kilograms.]

	Florins.
1. Cacao beans and shells	24.00
NOTE.—When imported by sea	20.00
2. Coffee:	
a. Raw	40.00
NOTE.—When imported by sea	37.00
b. Burnt	50.00
3. Tea	100.00
NOTE.—When imported by sea	90.00

II.—*Spices.*

4. Pepper (also long and Cayenne and white pepper, pepper dust), allspice (pimento), ginger	24.00
5. Cinnamon of all kinds	40.00
6. Aniseseed (badian), cloves (also clove stems), clove flowers (mace), nutmegs in shells	60.00
7. Nutmegs, without shells	80.00
8. Cardamom, saffron, vanilla	120.00
NOTE.—Articles numbered 4–8, when imported by sea, are allowed a reduction of 5 florins per 100 kilograms.	

III.—*Southern fruit.*

9. Figs:	
a. Fresh	3.00
b. Dried	12.00
10. Grapes, dried; currants, raisins	12.00
11. Lemons, oranges, citrons	8.00
NOTE.—When counted 100 pieces	160.00
12. Lemons, oranges, and citrons laid in salt water; oranges, unripe, small; orange and lemon peel	3.00
13. Dates, pistachio nuts	15.00
14. Almonds:	
a. Dried, with or without shell	15.00
b. Unripe, in the shell	6.00
15. Nuts of the *Pineus pinea*, unshelled; St. John's bread; chestnuts, lazeruoli, tomatoes; olives, fresh, dried, or salted	3.00
16. Nuts of the *Pineus pinea*, shelled; pomegranates	12.00

IV.—*Sugar.*

17. Raw sugar:	
a. Below the Dutch standard No. 19	15.00
b. From the Dutch standard No. 19 and above	20.00
18. Refined sugar	20.00
19. Solutions of sugar, crushed sugar, starch sugar, grape sugar, in a solid state	15.00
20. Sirup; starch sugar, grape sugar, in a fluid state; molasses	6.00
NOTE TO CLASS IV.—The excise duty is included in the tariff.	

V.—*Tobacco.*

21. Tobacco, raw; *i. e.*, tobacco leaves, stems, ribs, and flowers, unmanufactured; corrosive tobacco liquid	*21.00

* With special consent only.

		Florins.
22.	Tobacco, manufactured; *i. e.*, smoking tobacco in rolls, unrolled or stemmed; leaves or cut; carrot tobaccoor, stems for making snuff; tobacco, powdered; refuse; cigars; cigarettes; snuff; chewing-tobacco; also paper made from stems and ribs of tobacco leaves. (With special consent only)	52.50
	NOTE.—In case of special permit, there are aside from this to be paid the following taxes for 1 kilogram net:	
	For cigars and cigarettes	11.00
	For other manufactures	8.40
	For raw tobacco	7.00
	Tobacco and manufactures therefrom must also be declared in conformity with the above subdivisions.	

VI.—*Grain and legumes; flour and products of flour; rice.*

	Grain:	
23.	Barley, oats, Indian corn, rye	0.25
24.	Wheat, spelt, half fruit, buckwheat, millet	0.50
	NOTE.—For the supply of Dalmatia and the islands in the Adriatic, the I. R. Government may, in unison with the Government of Hungary, permit the free importation of the following kinds of grain, *i. e.*, Indian corn, not exceeding 80,000 met. centners; wheat and millet, not exceeding annually 20,000 met. centners; to be entered in ports and under modifications mutually agreed upon:	
25.	Malt	0.60
	Legumes:	
26.	Beans, lupines, pease, lentils, vetches	0.50
27.	Flour and mill products (crushed, bruised, and peeled grains; barley, groats, oat-meal, wheat groats) made of grains and legumes	1.50
28.	Rice, peeled and unpeeled; broken rice	2.00
	NOTE 1.—Raw rice, wholly or partly in shells, for rice-mills, to be cleaned and broken; rice for the manufacture of starch, pay one-half, and when imported by sea, one-fourth of the lowest tariff for shelled rice.	
	2. Products of rice-mills will be entered according to No. 27.	

VII.—*Vegetables, fruits, plants, and parts of plants.*

29.	Vegetables and fruit: Grapes, fresh, for the table; pine-apples	5.00
30.	Nuts and hazel-nuts, dry or shelled	2.50
31.	Fine vegetables, fresh	2.50
32.	Vegetables and fruit not otherwise provided for:	
	a. Fresh	Free
	b. Dried or prepared (baked, cut into pieces, preserved, powdered, or otherwise reduced in size; salted or preserved in vinegar and packed in casks; jelly without sugar)	2.50
	NOTE.—Vegetables and fruit in cans, bottles, or otherwise hermetically sealed or prepared in another manner, as above described, will be treated as eatables under 92, respectively, No. 93.	
	Plants and parts of plants:	
33.	Oilseed	0.50
34.	Anise, coriander, caraway seed; fennel; clover-seed; mustard-seed (also ground in casks); seeds not otherwise provided for; suchory root, dried (not burnt)	0.50
35.	Living plants; fresh cut flowers and plants	1.50
36.	Plants and parts of plants not otherwise provided for, fresh; grain and legumes in straw or leaves; teasels; seagrass; bark; cane; straw; hay; litter	Free
37.	Plants, and parts of plants not otherwise provided for, dried or prepared (powdered, colored, or otherwise reduced in size)	2.50
38.	Hops; also lupulin	10.00

VIII.—*Cattle and draught animals.*

[Per head.]

39.	Oxen	10.00
40.	Bulls	4.00
41.	Cows	3.00
42.	Young cattle	2.00

	Florins.
43. Calves	1.00
44. Sheep and goats (also rams, wethers, and bucks)	0.50
45. Lambs and kids	0.25
46. Hogs	3.00
47. Pigs not weighing more than 10 kilograms	3.00
48. Horses and foals	10.00
NOTE.—Foals following the mother are free.	
49. Mules and asses	2.00

IX.—*Other animals.*

[Per 100 kilograms.]

50. Game and fowls of all kinds:	
a. living	Free.
b. dead	6.00
51. Fish, fresh; crabs and crawfish; snails, fresh	1.00
52. Shell-fish from the sea (*i. e.*, oysters, lobsters, crab-spiders), turtles, not prepared	10.00
53. Animals not otherwise provided for	Free.

X.—*Animal products.*

54. Milk	Free.
55. Birds' eggs	1.50
56. Beehives with honey and wax; beehives with living bees	Free.
57. Honey	1.50
58. Wax, white, yellow, and colored (also celluloid)	5.00
59. Sponges	15.00
60. Skins and hides, raw (green or dry, also salted or pickled but not otherwise prepared)	Free.
61. Hair of all kinds, raw or prepared (*i. e.*, heckled, boiled, dyed, stained, or curled), bristles	Free.
62. Feathers not otherwise provided for (bed-feathers, quills), ornamented feathers, undressed	Free.
63. Bladders and intestines, fresh, salted, or dried; gold-beaters' skins; cat-guts	2.00
64. Animal products not otherwise provided for	Free.

XI.—*Grease.*

65. Butter, fresh, salted, melted, also artificial butter	10.00
66. Lard and goose-grease; bacon	16.00
67. Stearin acid, palmine acid	6.00
68. Paraffine, cerasine, spermaceti	4.00
69. Tallow from animals, raw, melted, also pressed	1.00
70. Palm oil and cocoanut oil in solid state; vegetable tallow	1.00
NOTE.—When imported by sea	0.50
71. Grease and greasy mixtures not otherwise provided for; blubber	1.00

XII.—*Oils, fat.*

72. Olive, poppy, sesame, earth-nut, beech-acorn, sun-flower, and cotton oil, in casks, skins, and bladders	4.00
NOTE.—Olive oil under No. 72, rendered totally unfit for human consumption under official examination on entry by custom-houses specially designated	0.80
73. Rape seed and linseed and other fat oils not otherwise provided for, in casks, skins, and bladders, except oil varnish (No. 334)	2.00
74. Oils, fat, in jugs or flasks	10.00

NOTE TO CLASS XII.

1. Oils of No. 72 and 73, when entered for the use of the people living near the frontier and contained in open jugs, tin cans, or bottles, or similar open vessels, will be treated like oil in open casks.
2. Oils fat, in jugs, bottles, or similar vessels, weighing not less than 25 kilograms, will be treated like fat oils in casks.

XIII—*Beverages.*

	Florins.
75. Beer and mead:	
a. In casks	3.00
b. In bottles and jugs	8.00
NOTE.—Consumption tax on manufacturer of beer included.	
76. Distilled spirituous liquors:	
a. Alcohol and brandy of all kinds, also adulterated	24.00
b. Liquors, essence of punch and other sweet spirituous cordials, arac, rum	40.00
NOTE.—Consumption tax included.	
77. Wine and substitutes for wine, also cider, wine must and fruit must:	
a. In casks or flasks	20.00
b. Sparkling wines	50.00
NOTE.—Wine mash and grapes to make wine	6.00
78. Vinegar:	
a. In casks	3.00
b. In bottles or jugs	8.00
79. Mineral waters, natural or manufactured:	
NOTE TO NOS. 75 AND 78.—Beverages when entered for the use of the people living near the frontier and contained in open jugs, tin cans, flasks, or bottles, will be treated like beverages in casks.	

XIV—*Eatables.*

80. Bread, ordinary, black as well as white, ship biscuits	1.50
81. Sago and substitutes for sago, tapioca, arrowroot	6.00
82. Wafer cakes (*i. e.*, vermicelli and similar farinaceous products not baked).	6.50
83. Meat, fresh or prepared (*i. e.*, salted, dried, smoked, pickled)	6.00
84. Sausages	20.00
85. Cheese	10.00
86. Herrings, salted or smoked	3.00
87. Fish not otherwise provided for, salted, smoked, dried	5.00
88. Fish prepared (pickled or preserved in oil, &c.) in casks	15.00
89. Caviar, and substitutes of caviar	50.00
90. Substitutes for coffee (also succory burnt)	15.00
91. Cacao, ground or in bulk; chocolate, substitutes for chocolate, and manufactures	50.00
92. All eatables contained in boxes, jugs, cans, and bottles hermetically sealed (except those enumerated under 89 and 91)	40.00
93. Eatables not otherwise provided for	40.00

XV.—*Wood, coal, and turf.*

94. Firewood, also bark, copsewood, basins, osiers, brushwood, tan bark, tan cakes	Free.
95. Timber, dressed or undressed, staves, saw-logs (except veneers):	
a. European	Free.
b. Not European	Free.
96. Charcoal, turf, lignite, coal, cokes, and all other hard artificial fuel made from these materials	Free.

XVI.—*Turners' and carvers' materials.*

97. Chaircane, raw, not split, canes, reeds, better quality	Free.
98. Cocoa and coquilla nuts and cocoanut shells; areka and stone nuts	Free.
99. Horns, horn ends and tips, claws, feet, hoofs; bones, split, stretched, or cut	Free.
100. Amber (also imitation); jet; ivory and other animal teeth; tortoise shell; meerschaum; mother of pearl, and other muscle shells	Free.
The articles under 99 and 100, raw or only split, stretched, or cut.	
101. Whalebone, raw; corals, raw (also bored but not cleaned or ground)	Free.

XVII.—*Minerals.*

102. Stones, rough, or only cut or sawed; ore, also prepared	Free.
103. Clay and mineral stuffs:	
a. Raw	
b. Burned, washed, or ground	0.20
All these articles if not otherwise provided for.	

XVIII.—*Drugs and perfumery stuffs.*

	Florins.
104. Licorice juice, galangal	60.00
105. Ambergris, castoreum, musk, civet, canthridines, musk seed grains, cubebs, opium, cacao butter, muskat balsam (muskat butter), camphor refined, jalap resin, bayswater	15.00
106. Lavendar, orange flower, rose, and similar fragrant waters (without spirits of wine)	6.00
107. Oils, ethereal:	
a. Amber, hartshorn, India rubber, laurel, rosemary, and juniper oil	6.90
b. Ethereal oils not otherwise provided for	25.00
108. Vinegars, grease, and oils, perfumed, in inclosures weighing not less than 5 kilograms	10.00

XIX.—*Dyeing and tanning stuffs.*

109. Dye woods:	
a. In blocks	Free.
b. Cut into pieces (rasped, ground, cut)	0.50
110. Barks, roots, leaves, flowers, fruits, gall-nuts, &c.; also cut, ground, or otherwise reduced in size for dyeing or tanning	Free.
111. Catechu (Japan clay), kino, kermes grain, lac dye, amotto	Free.
112. Extract from wood of chestnut tree, madder extract, garancine, and garancinette; litmus; lepin, crude, in bladders	1.50
113. Orchilla, persis; indigo; cochineal; extracts from tanning and dyeing materials not otherwise provided for	3.00
NOTE.—Indigo and cochineal when imported by sea	Free.

XX.—*Gum and resin.*

114. Tar of all kinds, except coal and slate tar	0.20
115. Resin, ordinary; colophony; pitch; ozocerit	0.50
116. Asphalt mastich and asphalt bitumen	1.00
117. Turpentine, oil of turpentine, pitch oil, resin oil, bird lime	1.50
118. Copal resin, Damar resin, shellac, gum arabic, gum gedda, gum Senegal, gamboge, gum tragacanth; gums, resins, natural balsams, and juices of plants not otherwise provided for; lemon juice	1.50

XXI.—*Mineral oils, also coal and slate tar.*

119. Crude illuminating oil, not capable of being used until refined:	
As heavy, the density of which at 12° of Reaumur does not exceed 83° of distilled water	net 1.10
b. Light, at and below .830 of distilled water	net.. 2.00
120. Crude, capable of being used for lighting without previous refinement, net	10.00
121. Refined or half refined:	
a. Heavy, with a density of over 870°	net.. 1.90
b. Light, at and below 870°	net.. 10.00
NOTE.—In 120 and 121 *b* consumer's tax is included.	
2. Crude mineral oil, not being capable of being used for lighting without previous refinement, of Roumanian origin, with a density of over 830°, at 12° Reaumur (No. 119 *a*), on entry over Roumanian frontier, and producing certificate of origin	net.. 0.68
3. Refined mineral oils intended to be used in making solutions or extracts in industrial establishments, with a density of less than 770°, on compliance with the respective regulations and measures of control	Free.

XXII.—*Cotton, yarn, and goods of the same, also mixed with linen, but without any wool or silk.*

122. Cotton, raw, carded, bleached, colored, milled, refuse	Free.
123. Cotton wadding	5.00
Cotton yarns:	
124. Single or double, raw:	
a. Up to No. 12, English	6.00
b. Above No. 12 up to No. 29, English	8.00
c. Above No. 29 up to No. 50, English	12.00
d. Above No. 50, English	16.00

	Florins.
125. Single or double, bleached or dyed:	
a. Up to No. 12, English	10.00
b. Above No. 12 up to No. 29, English	12.00
c. Above No. 29 up to No. 50, English	16.00
d. Above No. 50, English	20.00
126. Three or more twisted threads, raw, bleached, or dyed	24.00
127. Yarns adjusted for the retail trade	30.00
Cotton goods:	
128. Ordinary, smooth, *i. e.*, textures of yarn No. 50 and below, 38 threads to a square of 5 millimeters or less, smooth, also singly twilled.	
a. Raw	32.00
b. Bleached	40.00
c. Colored, Turkey red excepted	50.00
d. Woven in several colors, printed or colored Turkey red	60.00
129. Ordinary, figured, *i. e.*, textures of yarn No. 50 and below, 38 threads or less to a square of 5 millimeters, figured:	
a. Raw	40.00
b. Bleached, colored, except Turkey red	50.00
c. Woven in several colors, printed or colored Turkey red	70.00
130. Ordinary, coarse, *i. e.*, textures of yarn No. 50 and below, with more than 38 threads to a square of 5 millimeters:	
a. Raw	50.00
b. Bleached, colored, except Turkey red	60.00
c. Woven in several colors, printed or colored Turkey red	80.00
131. Fine, *i. e.*, textures of yarn above No. 50 up to No. 100, inclusive:	
a. Raw	70.00
b. Bleached, colored, woven in several colors or printed	100.00
132. Finest, *i. e.*, textures of yarn above No. 100; tulle (bobbinet, petinet, curtain stuffs, and furniture nettings); goods in connection with metallic threads	160.00
133. Embroidered woven goods, laces	200.00
134. Velvets and velvet-like fabrics (cut or uncut), ribbons, fringes, buttons, and knit goods	80.00
135. Lamp wicks, girths, beltings, hose, trellis, nets, and ropes, coarse, stiff nets	24.00

XXIII.—*Flax, hemp, jute, and other vegetable spinning material, yarns, and fabrics of the same, without admixture of cotton, wool, or silk.*

136. Flax, hemp, jute, and other vegetable spinning materials not otherwise provided for, raw, steeped, broken, hackled, bleached, and in refuse	Free.
Linen yarns:	
137. Flax and hemp yarns, yarns not otherwise provided for:	
a. Single, raw	1.50
b. Single, bleached, boiled in ashes, or colored	5.00
c. Twisted	12.00
d. Linen thread, prepared for retail trade, bleached, colored	30.00
NOTE.—Raw twisted hemp yarn for the manufacture of hose and the like, on producing a permit, and under the existing rules, regulations, and control	6.00
138. Jute yarns:	
a. Single, raw	1.50
b. Twisted, bleached, boiled in ashes, or colored	5.00
Linen goods:	
139. Gray canvas, *i. e.*; smooth, coarse, simple, twilled texture, without figures, made of hemp or flax, not having more than 5 warp threads to 5 millimeters; also bags made of the same	2.00
NOTE.—Marked bags, having been in use, made of gray canvas, are free.	
140. Linen goods, not figured, raw, up to 20 warp threads to 5 millimeters	12.00
141. Linen goods, not figured, bleached, colored, woven in several colors, printed:	
a. Up to 10 warp threads to 5 millimeters	20.00
b. From 11 to 20 warp threads, to 5 millimeters	40.00
142. Linen goods, figured, up to 20 warp threads, to 5 millimeters	40.00
143. Linen goods above 20 warp thread, to 5 millimeters	80.00
144. Cambric, gauze, lacons, and other thin-woven stuffs	120.00
145. Fabrics in connection with metallic threads	160.00

		Florins.
146.	Laces, edgings, embroidered woven goods	200.00
147.	Velvet-like fabrics (cut or uncut), fringes, buttons, ribbon, and knit goods	80.00
	Jute textures:	
148.	Bagging and packing stuffs of jute, raw, unbleached, neither colored nor figured, also, simply twilled, of not more than 5 warp threads to 5 millimeters, as well as ready-made bags made therefrom	6.00
	NOTE.—Marked bags made of jute, having been in use, are free.	
149.	Furniture stuffs and dress goods, tapestry, as well as all textures of jute, in connection with other vegetable spinning materials, including cotton, or of which jute forms the principal component part, also similar jute textures embroidered or in connection with metallic threads	40.00
150.	Jute textures not otherwise provided for; carpets, carriage rugs, and stair carpets of jute, and of other vegetable spinning materials not otherwise provided for; also bleached, colored, printed, or figured	12.60
151.	Ropemakers' goods:	
	a. Ropes, cables, cords, also bleached, tarred	3.00
	b. All other ropemakers' goods, also bleached, colored, tarred, sized, and varnished	12.00

XXIV.—*Wool, woolen yarn and woolen goods, also mixed with other spinning materials, except silk.*

152.	Wool, raw, washed, combed, colored, bleached, milled, and as refuse	Free.
153.	Wool and hair tablets, hat felts, and hat wadding	9.00
154.	Woolen yarns (of wool or animal hair) and Vicugna yarns:	
	a. Raw	8.00
	NOTE.—Weft yarn, raw, on entry by way of custom-houses specially designated	1.50
	b. Bleached, colored, printed, three or more twisted threads	12.00
	Woolen goods (of wool or animal hair):	
155.	Shaggy cloths, Halina cloths, pressed cloths, sieve bottoms, ropes, cables made of horse hair, trellis and tied nets, both uncolored, hat clippings, cloth cuttings	12.00
156.	Carpets:	
	a. Of dogs, calf, or cows' hair, also with slight mixture of wool	12.00
	b. Others, also printed	40.00
157.	Girths	40.00
158.	Woolen woven goods not specially named:	
	a. Weighing over 500 grams per square meter	50.00
	b. Weighing 500 grams and less per square meter	80.00
	NOTE.—Entirely woven with cotton warp, of one color, not figured, dressed like cloth, weighing more than 300 grams per square meter	50.00
159.	Velvets and velvet-like fabrics (cut or uncut), fringes, buttons, ribbons, and knit goods (except those under 156 *b*)	80.00
160.	Light woolen woven goods	100.00
161.	Shawls and shawl-like textures, laces (lace shawls), embroidered woven goods, goods with metallic threads	150.00
162.	Felt and feltware (except carpets):	
	a. Coarse felts of animals' hair, also cut out, tarred, or varnished	12.00
	b. Felts others, and feltware, both not printed	40.00
	c. Printed	80.00

XXV.—*Silk and silk goods, also mixed with other spinning material.*

163.	Cocoons, silk scraps, not spun	Free.
164.	Flocks of silk	12.00
165.	Silk (reeled), also twisted:	
	a. Raw	Free.
	b. Made white or colored, or in connection with other spinning materials	22.00
166.	Floss silk (silk scraps spun), also twisted:	
	a. Raw, or made white	Free.
	b. Colored, or in connection with other spinning material	22.00

		Florins.
167.	Sewing silk, button-hole silk, and the like, made white or colored; thread of all kinds prepared for retail trade	50.00
	NOTE.—Soft-carded yarn, raw, containing one thread of unreeled silk will be treated like woolen yarn under No. 154 *a*.	
	Silk goods:	
168.	Blond lace, lace (lace handkerchiefs), silk goods, embroidered, or in connection with metallic threads	400.00
169.	Goods entirely made of silk, or floss silk	400.00
170.	Half silk goods *i. e.*, all goods not enumerated under No. 168, containing other spinning materials aside from silk or floss silk	200.00
	NOTE.—(1). Very coarse textures of raw-silk waste, having the appearance of gray packing canvas, and intended for pressing clothes, dust rags, &c., also with single-colored threads	24.00
	(2.) Silk, spun together with yarn of other materials, without covering the same or without passing continuously through the whole length of the spinning thread, is not classified under textures made from such yarn.	

XXVI.—*Clothing, linen, and articles of dress, exclusive of such goods made of paper, leather, gutta-percha, and wax cloth.*

171.	Artificial flowers, finished, wholly or partly of woven or worsted goods; ornamental feathers, prepared, and fabrics made therefrom	170.00
172.	Parts of artificial flowers	70.00
	Hats and caps:	
173.	Gentlemen's hats of silk and stuffs of all kinds; also trimmed	130.00
174.	Gentlemen's hats of felt: also trimmed	90.00
	NOTE.—Felt prepared in hat form	50.00
175.	Hats not otherwise provided for	per piece
	a. Not trimmed	0.20
	b. Trimmed	0.40
	c. Ornamented	0.50
	NOTE.—Trimmed means only furnished with lining, braiding, and hat band.	
176.	Clothing, linen, dress goods not otherwise provided for, pay an additional duty of 40 per cent., according to the material which forms the principal component part.	
	NOTE.—(1.) On declaring clothing, linen, and dress goods, the principal part of which they are composed must be stated.	
	(2.) Other sewed articles, not otherwise provided for, will be treated according to No. 176.	
	(3.) Clothing and linen, cut out only, will be treated like the material of which they are composed.	

XXVII.—*Brush and sieve-makers' goods.*

177.	Common brushes and brooms made of bristles, rice straw, piassava, and other animal or vegetable stuffs; also mounted with wood or iron, not colored, without polish or varnish	4.00
178.	Wooden sieves, finished, with bottoms of wicker-work or iron wire, under No. 261 *a*; wooden-sieve bottoms	4.00
179.	Brush and sieve makers' goods not otherwise provided for; scrubbing and horse brushes in connection with woven or worsted stuffs, in so far as they do not come under the head of India-rubber, leather, bone, metal, or fancy goods	15.00

XXVIII.—*Straw and bast goods, also goods made of rushes, cocoanut fiber, grass, reed, chips, cane, roots, &c.*

180.	Chair cane:	
	a. Raw, split	0.50
	b. Stained, colored, varnished	5.00
181.	Carpets and mats (carriage rugs, &c.):	
	a. Not colored	3.00
	b. Colored	5.00
182.	Coarse goods for domestic use (*i. e.*, baskets, dishes, plates, &c.), also in connection with wood	5.00
183.	Braids, also rugs, not otherwise provided for, also in connection with other materials if not coming under No. 184, or under India-rubber, leather, metal, or fancy goods, with a higher tariff	15.00

	Florins.
184. Braids, finest, *i. e.*, textures with silk or other spun yarn, with horse hair or metallic threads drawn through or woven in, also in connection with other materials, if not coming under fancy goods....	50.00

XXIX.—*Paper and paper goods.*

185. Paper material, bleached or unbleached:	
a. Of rags (half material)	Free.
b. Of wood, straw, esparto, and similar fibers.....	0.50
186. Gray blotting paper, coarse packing paper uncolored, common pasteboard, tar and stone paste board	1.00
187. Wrapping paper, glazed or colored, varnished or tarred.....	3.00
188. Glazed cardboard, gloss and leather pasteboard, slate paper and tablets from the same (unconnected with other material), pumice stone, glass, sand and emery paper, pumice stone and emery cloth...	3.00
189. Paper, unsized, ordinary (coarse gray, half white and colored); all printing papers not sized	5.00
190. Paper not otherwise provided for.....	5.00
191. Lithographed, printed or ruled paper for mottoes, labels, bills of lading, billheads, &c., drawing paper, albumen paper, gelatine paper, parchment, copperplate paper, colored paper, painters' pasteboard.....	7.00
192. Gold and silver paper and paper with gold or silver patterns (genuine or imitation, also bronzed), pressed or perforated paper, stripes of the foregoing kinds of paper; paper and pasteboard covered with linen (also cotton and linen), wall paper	15.00
193. Molders' work of stone pasteboard, asphalt, or similar materials:	
a. Neither painted nor varnished, also in connection with wood or iron	2.00
b. Others also in connection with other materials if not coming under No. 195 or under India-rubber, leather, metal, or fancy goods..	15.00
194. Paper goods, *i. e.*, articles of paper or cardboard, paper pulp or ligneous fiber; also in connection with other materials, if not coming under No. 195 or under India-rubber, leather, metal, or fancy goods, hat linings of paper, also covered with textures.....	15.00
195. Fancy ornamental paper goods, fine cartoons, labels, vignettes in different colors (chromo-lithographs), toys, paper linen, book bindings covered with linen (also cotton and linen); also in connection with other materials, if not coming under leather or fancy goods with a higher tariff	30.00
196. Playing cards.....	60.00
NOTE.—Playing cards must moreover be stamped according to regulations in force, and must be declared according to number and condition of the games and the number of cards they contain.	

XXX.—*India-rubber and gutta-percha and articles made therefrom.*

197. India-rubber and gutta-percha, raw and prepared	Free.
198. India-rubber melted, India-rubber threads not spun over	1.50
199. India-rubber hardened, in sheets, tubes, and bars, also, polished, but without further manufacture	6.00
200. Hose and beltings of all kinds of or with India-rubber, also with layers of tissue or of wire.....	12.00
201. Shoes, also in connection with woven or worsted goods and other materials, unless coming under leather or fancy goods, with a higher tariff	30.00
202. Children's toys	30.00
203. Articles of soft India-rubber, except those enumerated under 200, 201, and 202	20.00
204. Textures covered with India-rubber, dipped, coated, or fastened by means of layers of India-rubber	45.00
NOTE.—Textures for covering carding benches in manufactories, or India-rubber printing cloth for cotton mills by special permit, according to regulations and control to be made public.....	3.00
205. Clothing and other articles made from tissues enumerated under No. 204.	50.00
206. Elastic textures, knit goods, trimmings and articles made therefrom..	70.00
Shoe lastings with India-rubber threads glued on.....	45.00

		Florins.
207.	Goods made of hardened India-rubber, the goods enumerated under 202, 203, 205, 206, and 207; also in connection with other materials if not coming under a higher tariff, as leather, metal or fancy goods	
	Goods made of gutta-percha will be treated like goods made of India-rubber.	
	XXXI.—*Wax cloth and wax silk.*	
208.	Wax cloth, coarse, *i. e.*, wax cloth for packing, not printed; asphalt linen	2.00
209.	Carriage covers of coarse textures covered with or dipped in oil, tar, or compositions of oil	10.00
210.	Thick floor coverings of wax cloth, linoleum, camptulikon and similar compositions	10.00
211.	Wax cloth not otherwise provided for, also wax muslin	20.00
212.	Wax silk	26.00
	XXXII.—*Leather and leather goods.*	
213.	Leather, ordinary, *i. e.*, not enumerated under Nos. 214 and 215, also cut; blackened neat and horse leather, also grained in entire or in half skins	9.00
	NOTE.—Sheep and goat skins, tanned (neither white nor chamois dressed), also split, not colored	6.00
214.	Sole leather and sole leather refuse	18.00
215.	Leather, fine, *i. e.*, blackened leather, except the neat and horse hides enumerated under No. 213; glove leather, cordovan, morocco, Turkish leather, as well as all colored, japanned, and bronzed leather, also leather with pressed designs; parchment	18.00
216.	Leather goods, ordinary, *i. e.*, articles of ordinary leather (neither white nor chamoise dressed), also of blackened or grained neat and horse leather or coarse wax cloth; harness and trunk-maker's manufactures made from haired skins, of raw jute textures, gray packing canvas, raw ticking, drillings, canvas and other coarse raw linen textures, also girths	25.00
217.	Leather goods, fine, *i. e.*, articles of white chamois dressed leather, parchment, or of fine leather enumerated under No. 215, of wax cloth or wax silk not otherwise provided for; harness and trunk makers' articles made of textures enumerated under No. 216, bleached, colored; also of carpet tissues	35.00
	The goods named under 216 and 217, also in connection with other materials, provided they do not come under India-rubber, metal, or fancy goods with higher tariff.	
218.	Shoes of all kinds, of or with leather; also in connection with woven or worsted goods and other materials, if not coming under fancy goods	35.00
219.	Gloves of leather (even if only cut out or in connection with woven or worsted goods)	50.00
	XXXIII.—*Furriers' goods.*	
220.	Furs, tanned on one side, not made up:	
	a. Of common skins	10.00
	b. Of fine skins	50.00
221.	Furs made up:	
	a. Of common skins	40.00
	b. Of fine skins	200.00
	NOTE.—Clothing, not of silk, and leather gloves covered, lined, or trimmed with fine fur, will be treated like fine fur goods made up.	
	XXXIV.—*Wood and bone ware.*	
222.	Ordinary wooden ware, *i. e.*, coarse, rough coopers', turners', and joiners' material of unstained wood, also plain wooden ware and wagon-makers' work; coarse machines (also lathes, mangles, mills, presses, spinning-wheels, and looms); coarse baskets (packing and market baskets, hampers and clothes baskets, kiddles, &c.); birch brooms; agricultural, garden, and kitchen tools:	
	a. Neither colored, stained, varnished, japanned or polished, nor in connection with other materials	1.00

		Florins.
	b. Raw, but with mountings or otherwise, connected with iron or other base metals	3.00
	c. Colored, stained, varnished, japanned or polished, or with any combinations mentioned under No. 223 *c*	3.00
223.	Wooden furniture and parts of furniture (as far as not enumerated under Nos. 222, 224, and 225):	
	a. Fine raw	3.00
	b. Colored, stained, varnished, japanned or polished, or in connection with bast, reeds, cane, straw, and wicker work, base metals, glass, stone slabs, or common leather	3.00
	c. Furniture, cushioned, without cover	15.00
	d. Furniture, cushioned, with cover	20.00
224.	Wooden-ware, fine, *i. e.*, fine turned and carved articles, wooden bronzes, gilt or silvered wooden ware, or finely painted. All wooden ware not otherwise provided for, and goods made of the vegetable carving material	15.00
225.	Wooden ware, finely inlaid (buhlwork, intarsien), fine baskets and wicker work	20.00
226.	Veneers, not inlaid, parquetry and parts of the same:	
	a. Raw	1.50
	b. Stained, colored, polished	3.00
227.	Veneers, inlaid	12.00
228.	Cork:	
	a. Sheets, slices, squares	1.50
	b. Stoppers, soles, and other articles of cork	12.00
229.	Wooden toys:	
	a. Coarse, simply planed, carved or turned, raw	1.00
	b. Other	20.00
230.	Boneware:	
	a. Whalebone, split	5.00
	b. Boneware not otherwise provided for	20.00
	The goods enumerated under Nos. 224, 225, 229 *c*, and 230 *c*; also in connection with other materials, if not coming under India-rubber, leather, metal, or fancy goods, with a higher tariff.	

XXXV.—*Glass and glassware.*

231.	Glass mass, enamel and glazing mass, ground glass (glass dust)	1.50
232.	Hollow glass, ordinary, *i. e.*, uncut, without design, neither polished nor pressed:	
	a. In its natural color, but not white	2.00
	b. White (transparent) gross	4.00
233.	Hollow glass in its natural color, or white (transparent), only with ground or polished stoppers, bottoms, and edges gross	4.00
234.	Hollow glass, white (transparent), cut, figured, pressed, fluted, etched; solid white glass not otherwise provided for	8.00
	Plate-glass:	
235.	Glass, for mirrors, raw, uncut; cast plates, rough, fluted, also tiles	1.50
236.	Window-glass, in its natural color (green, half or entirely white), neither cut nor figured gross	4.00
237.	Plate-glass of all kinds, cut, figured, dimmed, or overlaid; framed looking-glasses	12.00
238.	Optical glass, *i. e.*, flint, crown, zinc, and borax glass, rough, not ground for lenses, in pieces and tablets, or pressed into the form of lenses, also partly ground	1.50
239.	Crystals for watches, glasses for spectacles, and other optical glasses, adjusted or ground	50.00
240.	Glass tubes, rods, and pipes, without regard to color (such as used for the manufacture of beads, artistic blowing, and the manufacture of buttons)	1.50
241.	Glass pendants, solid, for chandeliers, glass beads, glass buttons, glass enamel, glass drops, glass spinnings, also colored	2.00
242.	Glass, colored (except the articles enumerated under Nos. 240 and 241), painted, gilt, silvered; glass paste imitation gems without setting	12.00
243.	Glass and enameled goods not otherwise provided for or in connection with other materials, if not coming under India-rubber, leather, metal, or fancy goods with a higher tariff	15.00

XXXVI.—*Stoneware, i. e., work in stones and unburnt clay, cement, and ston compositions.*

	Florins.
244. Stone-cutters' work (such as door and window frames, pillars and parts of pillars, gutters, pipes, troughs, &c., uncut, except those of alabaster and marble); touch, grind, and whet stones, without any connection; millstones, also with iron bands or metal casings; plates and lithographers' stones, cut, unpolished; playing-marbles, &c.; casts made of plaster or sulphur, of coins, cameos, &c	0.25
245. Prepared minerals, such as artificially-colored clay and stone; cement, and goods made therefrom (not polished); slabs and plates cut, not polished; cleaning, grinding and polishing substances in their natural state prepared for retail trade	0.50
246. Stoneware, ordinary, *i. e.*, articles of stone not otherwise provided for, also in connection with wood and iron, without varnish or polish	1.50
247. Stoneware, fine, *i. e.*, fancy articles (letter-weights, candlesticks, cups, inkstands, and similar fancy objects), statues, busts, figures of animals, and other plastic works, weighing 5 kilograms or less; articles in connection with other materials, if not coming under India-rubber, leather, metal, or fancy goods with a higher tariff	15.00
248. Stones, genuine (precious or half precious stones), and corals (genuine and imitation), prepared, *i. e.*, ground, cut, or otherwise worked upon; genuine pearls, all these articles not set, if not coming under fancy goods	24.00

XXXVII.—*Clay-ware.*

249. Tiles and bricks; building ornaments (also of terra-cotta); clay pipes:	
a. Unglazed	Free.
b. Glazed	0.50
250. Pipes and thick plates of common earthenware, chamotte	0.50
251. Gas retorts, crucibles, vessels for manufacturing purposes (of graphite, fire-proof clay, or common stoneware)	0.50
252. Ordinary crockery-ware, made of common or hardened clay or stoneware; black graphite pottery	0.50
253. Stoves, and parts of stoves; Dutch tiles for floors or walls	3.00
NOTE.—Articles of Nos. 249 to 252, in connection with wood or iron, without varnish or polish	2.00
254. Clay-ware, not otherwise provided for:	
a. Of one color, or white	5.00
b. Of two or more colors, edged, painted, printed, gilt, silvered	8.00
255. Porcelain:	
a. White	7.00
b. Colored, edged, painted, printed, gilt, silvered	15.00
256. Clayware in connection with other materials, if not coming under India-rubber, leather, metal, or fancy goods with a higher tariff	15.00

XXXVIII.—*Iron and hardware.*

257. Raw iron; iron and steel, old, broken, and in scraps for melting and forging	0.80
NOTE (1).—In consideration of circumstances of a local character, foundries using old and scrap iron may be permitted, with the consent of the governments of both parts of the empire, to import old and scrap iron at the exceptional duty of 50 kreuzers for 100 kilograms, subject to a control of its appliance and the fixation of the maximum quantity.	
(2).—Iron filings and hammer scales	Free.
258. Loops; ingots	1.60
259. Iron and steel in bars, hammered or rolled:	
a. Not shaped	2.75
b. Shaped	3.50
260. Rails for railways	2.75
261. Sheet-iron and iron plates; wire:	
a. Of the thickness of 1 millimeter and more	4.00
b. Of the thickness of less than 1 millimeter	5.00
c. Varnished, coppered, tinned, or coated with zinc, lead or nickel; sheet-iron and plates polished	8.00

		Florins.
	Iron-ware:	
262.	Ordinary cast iron:	
	a. Pig-iron	2.00
	b. Scoured or coarsely painted; drilled, or only in few different places ground, twisted, or planed	4.00
	c. Ground, twisted, planed, coated with copper, tin, zinc, or lead, enameled, or finely painted	8.50
	The goods under *b* and *c*, also with the necessary cast iron or connecting wooden parts.	
263.	Common iron and steel goods made from malleable cast iron, cast steel, wrought iron, or steel, as far as they do not come under the following numbers:	
	a. Coarse, also brightened	4.00
	b. Coarsely painted, drilled, or ground in a few places, twisted, planed, with notches for the turning of a screw (also screw bolts and nuts)	5.00
	c. Ground, twisted, planed, or coated with copper, tin, zinc, lead, or finely painted	8.50
	All these goods also in connection with wood or cast iron.	
264.	Wrought-iron pipes, also joints	5.00
265.	Wrought-iron boilers, also steam boilers; perforated or grooved black sheet-iron and plates; goods made of black sheet-iron	6.00
266.	Car-wheels, finished, also on axle-trees	6.00
267.	Nails and tacks, springs for steel vehicles, hay and dung forks, hatchets, shovels (rough, brightened, or ground in some few places), scythes, sickles, straw-knives; also in connection with wood	6.50
268.	Wire rope, wire brushes, wire-sieve bottoms, coarse wire-work (made of wire under No. 261 *a*)	8.00
269.	Ordinary tools for cutting and drilling, *i. e.*, saws, plane and chisel irons, awls, gimlets, files, rasps, &c., cloth-makers' shears, coarse knives and scissors; all these for the use of mechanics and farmers (also machines); screws, locks; also ground, twisted, painted, coated with tin, zinc, copper, or lead, or in connection with wood	10.00
270.	Fine iron and steel ware:	
	a. Polished, japanned, enameled, coated with nickel (except the common enameled cast iron named under No. 262 *c*); *b.* Artificial and light ornamental castings; *c.* Wirework not otherwise provided for; pins, hooking and knitting kneedles, tacks, hooks and eyes, buckles, fish-hooks, thimbles, and similar small articles; children's toys, skates, steel cords, scrapers of all kinds; sleys, weavers' cards, springs, (watch and carriage springs excepted); *d.* Arms and parts of arms (firearms and gun-barrels excepted); cutlery, if not coming under 269 and 271; *e.* Furniture, cushioned, covered, or finely ornamented; *f.* Iron and steel goods in connection with other materials	15.00
271.	Fine cutlery, steel pens, wire spun over with thread; gun-barrels	30.00
272.	Guns; sewing needles	50.00
	The articles enumerated under Nos. 270, 271, and 272, if not coming under India-rubber, leather, metal, or fancy goods with a higher tariff.	

XXXIX.—*Base metals and goods made therefrom.*

273.	Lead and lead alloyages:	
	a. Raw, old, broken, and refuse	1.00
	b. Cast (boilers, pipes, sheets, bullets, shot, &c.), rolled, drawn out (lead wire), type, stereotype plates	4.50
274.	Zinc:	
	a. Raw, also old, broken, and refuse	Free.
	b. In bars, blocks, and sheets	1.50
	c. In wires and pipes; coarse zinc, cast, without other preparation, also in connection with ordinary woodwork, and bars and sheets of iron; grooved and perforated plates and sheets	3.00
275.	Tin:	
	a. Raw, also old, broken, and refuse	Free.
	b. In bars, plates, sheets, wires, and pipes; coarse tin, cast, without other preparation, also in connection with ordinary woodwork and bars or plates of iron	4.00

		Florins.
276.	Copper, nickel, antimony, brass, packfong, tombac, and other metals and metal compositions, not otherwise provided for:	
	a. Raw, also old, broken, and refuse; quicksilver	Free.
	b. In rough castings (*i. e.*, in bells and pipes, each weighing more than 5 kilograms, and in other objects weighing more than 10 kilograms)	6.00
	c. Drawn, stretched (in bars, tablets, plates), sheets, and wire, more than 5 millimeter	8.00
	d. Sheets and wire, 5 millimeter and less in thickness; grooved and perforated plates and sheets	10.00
	e. Plated (silvered) wire, sheets, tablets of copper and brass; imitation Leon (cemented) wire	15.00
277.	Tinware, coarse (dishes, plates, boilers, and other vessels), not varnished and not connected with other materials	5.00
278.	Metal-ware, ordinary:	
	a. Rollers-boiler tubes, boilers, cooking and distilling apparatus, unjapanned, unpolished, also in connection with wood and iron.	10.00
	b. Polished, varnished, japanned, nickel-coated, figured sheets and plates	12.00
279.	Metal-ware, fine, *i. e.*, all materials not embraced under other numbers, also in connection with other materials, if not coming under No. 280, or India-rubber, leather, or fancy goods with a higher tariff; telegraph cable	15.00
280.	Metal-ware, finest, *i. e.*, fancy articles and other finely finished (*i. e.*, ornamented, pressed, embossed, or nickel-coated), goods of packfong (German silver, alfenide and similar nickel compositions), Britannia metal, bronze, brass, tombac, and similar alloys, also in connection with other materials, if not coming under leather or fancy goods with higher tariff	30.00
281.	Metallic cloth, fine, having 20 warp-threads or more to 2 centimeters; writing pens; wire spun over with thread	30.00

XL.—*Machines and parts of machinery of wood, iron, or base metals.*

282.	Locomotive	8.00
283.	Tender, locomobile	6.00
284.	Sewing machines, with or without frame	20.00
285.	Machines made of wood (*i. e.*, with 50 per cent. or more of wood	3.00
286.	Machines made of base metals (*i. e.*, with more than 50 per cent. base metal)	10.00
287.	Machines not otherwise provided for:	
	a. When 75 per cent. or more of the total weight consists of cast iron or cast iron and wood	5.00
	b. Others	6.00
	NOTES.—(1.) Copper and brass rollers and plates, engraved or not engraved, for inland cotton mills, by special permit	Free.
	(2.) Machines and parts of machinery, also in connection with other materials, if not coming under fancy goods, belong to tariff class XL.	
	(3.) As parts of machinery are to be entered, such articles as have no independent use unless joined to other machinery, or moved by motive power; if, however, they constitute rough, unprepared, ordinary castiron, unconnected with other materials, or coarsely, wrought unfinished parts of machinery, they may be treated according to the condition of the material (Nos. *a* and 263 *a*), respectfully.	
	(4.) Machines not manufactured in Austria-Hungary may be entered from time to time on payment of one-half the duty by special permit of the governments of the two parts of the empire.	

XLI.—*Vehicles of transportation.*

	Street vehicles:	
288.	Lumber wagons and lumber sleighs	3.00
	Carriages (per piece):	
289.	Carriages, without leather or cushions	25.00
290.	Carriages, with leather or cushions	75.00
	NOTE.—Sleighs pay, under No. 289, one-half; and under No. 290, two-thirds of the duty.	

		Florins.
	Railway and horse cars (per 100 kilograms):	
291.	Freight cars	5.00
292.	Passenger cars, not cushioned	6.50
293.	Passenger cars, cushioned	9.00
	Ships (per ton burden):	
294.	Wooden (also iron or copper fastened)	0.40
295.	Iron; also of other base metals; steamships	5.00
	NOTE TO NOS. 294 AND 295.—Utensils for navigation (*i. e.*, sails and yards, anchors and anchor chains, riggings, small boats), if in reasonable amount and numbers, will pay no extra duty. Other articles of equipment, as well as steam engines of steamships, are subject to special tariff duty.	

XLII.—*Precious metals and coins.*

296.	Gold, silver, platina, precious metals, not otherwise provided for, raw, also old, broken, and refuse	Free.
297.	Coins:	
	a. Coins (also medals and medallions) of precious metal	Free.
	b. Coins of base metal	Free.
	NOTE.—Medals and medallions of base metals are classed according to the material of which they are composed.	

XLIII.—*Instruments, watches, fancy goods.*

[Per 100 kilograms.]

	Instruments:	
298.	Scientific instruments (astronomical, mathematical, physical, surgical), without regard to material out of which they are made	Free.
299.	Instruments for general use:	
	a. Optical; opera glasses, telescopes, spectacles, eye-glasses set, &c.	125.00
	b. Not otherwise provided for	50.00
	The goods enumerated under No. 299, *a* and *b*, if not coming under fancy goods with a higher tariff.	
300.	Musical instruments	10.00
	Watches (per piece):	
301.	Pocket watches:	
	a. With gold or gilted cases	1.00
	b. With silver or silvered cases	0.50
	c. With other cases	0.30
302.	Cases for watches:	
	a. Gold or gilt	0.70
	b. Silver or silvered	0.20
	NOTE.—Other cases according to material.	
303.	Movements to pocket watches	0.30

[Per 100 kilograms.]

304.	Ordinary wooden clocks, and movements belonging thereto; watch material	30.00
305.	Watches and movements not otherwise provided for, if not coming under fancy goods with a higher tariff	50.00
306.	Clocks for steeples and parts thereof	10.00
307.	Gold and silver ware, jewelry, and all goods not otherwise provided for, made wholly or partly of precious metals, genuine or imitation pearls or corals, set gems; gold and silver galloons, fabrics therefrom, as well as from gold or silver wire	300.00
308.	Genuine gold and silver leaf; wire and sheets of precious metals; fabrics of real gilt or silvered Leon spinnings or wires	200.00
	Fancy goods, fine:	
309.	Goods, not otherwise provided for, of base metals, with genuine gilting or silvering, or coated with gold or silver; goods of half precious stones, also sets; imitation pearls, artificial teeth, articles of wig-maker's work	100.00
310.	Goods made of or in connection with mother of pearl, ivory, tortoise shell, amber, jet	100.00
311.	Children's toys and goods not otherwise provided for in connection with:	
	a. Silk goods, laces, artificial flowers (No. 171), prepared ornamental feathers	100.00
	b. With other woven or worsted goods	50.00
	Fancy goods, ordinary:	

		Florins.
312.	Goods made of meerschaum, lava, celluloid, and similar artificial carving material, and imitations of the same	50.00
313.	Gentlemen and ladies' ornaments, toilet articles of base metals, of iron and steel finely made, also nickel-coated, embossed, enameled; such articles of animal or vegetable carving material or hardened India-rubber; bracelets and necklaces of glass and stone; fans; cases for opera-glasses, telescopes, and eye-glasses; steel pearls; metallic pearls, also gilt, silvered, or embossed	50.00
314.	Imitation Leon webs, and articles made therefrom; also articles of imitation Leon wires	50.00
315.	Embroideries upon other stuffs than woven or worsted fabrics; articles of embossed ware and of gold-beaters' skins; strings of musical instruments, and all strings spun over	50.00
	The articles enumerated under Nos. 309 to 315, if not belonging to fancy goods with higher tariff or specially classed.	
316.	Umbrellas and parasols:	
	a. Of silk ..... per piece..	0.48
	b. Of other fabrics ..... do	0.24

XLIV.—*Common salt.*

317.	Salt (bay salt, rock salt, salt spring, brine salt water), only by special permit	0.84
	NOTES.—(1.) In case special permission is granted, the license for 100 kilograms, net common salt, is 9.38 florins for 100 kilograms, kreuznach bittern, 1.88 florins.	
	(2.) Upon a physician's certificate the free importation of seawater for curing purposes will be permitted.	
	(3.) The minister of finance can permit the free importation of foreign salts for the manufacture of chemicals and such fabrics for which salt in large quantities is essential, if used only in manufactures and not as an article of food.	

XLV.—*Chemical auxiliary stuffs.*

318.	Borax, crude; boracic acid; Chili saltpeter (nitrate of soda), crude; sulphur (in blocks and bars), also ground and flower of sulphur; antimony; tartar, crude or refined; citrate acid, and tartrate of lime	Free.
319.	*a.* Dung salt (refuse from salt works and factories, and manure, artificial, made from mixtures of salt)	Free.
	b. Chloride of potassium; chloride of magnesia; glauber salt (sulphate of soda); sulphate of iron	0.20
	NOTE.—The articles enumerated under *a* and *b*, except glauber salt and sulphate of iron, unless imported by factories with that privilege, only by special permit and after examination of the extent of salt contained.	
320.	Arsenic, metallic (arsenic) arsenious acids (except arsenic or arsenical acids), arsenic sulphur (orpiment, realgar); corrosive iron liquids of all kinds; pyroligneous acid, raw; zaffer, smalt; strewing smalt; new or renewed ashes of bones (spodium); sulphuric acid; muriatic acid; nitric acid (aqua fortis)	0.50
321.	*a.* Soda (*i. e.*, carbonate of sodium), raw or crystallized; potash (simple carbonate of potassium); sulphate of potassium (duplicate salt); bicarbonate soda and potassium; glycerine (also glycerine lye)	0.80
	b. Soda, calcinated	1.20
322.	Alum; sulphate of ammonia, sal ammoniac, spirits of salt ammoniac, spirits of hartshorn; subsulphate of alumina and carbonate of alumina; admonter (mixed iron and copper), sulphate of copper and sulphate of zinc; ashes of lead; litharge (silver and gold litharge); borax, refined; chloride of lime; pyroligneous lime; pyroligneous clay; saltpeter (alkali and natron saltpeter), refined; sulphuret of carbon; soluble glass; aniline oil; carbolic acid, crude; nitro-benzine; anthracene, crude; naphtaline crude.	1.50
323.	White lead, white zinc (white oxide of zinc), ashes of zinc (gray oxide of zinc), white baryta (artificial sulphate of baryta); pyroligneous lead; acetate of lead; prussiate of potash, yellow and red; chloride of potash; verdigris; cement of all kinds; protoxide of lead; red lead; bicarbonate of soda and potash; carbonate of ammonia; tartaric acid; ashes of tin; proto-chloride of tin and other preparations of tin	

		Florins.
324.	Caustic potash; caustic soda; sulphate and hyposulphate of lime; crude manganate and permanganate of potash and soda; sulphate and hyposulphate of soda; oxalic acid (oxalate); oxalate of potassa; sulphate of magnesia; chromate of potassa, yellow and red....	4.00
	XLVI.—*Chemical products, colors, medicines, and perfumeries.*	
325.	Blacking (pine soot, printer's ink, and Frankfort blacking, ground charcoal and coal blackings of all kinds, except granulated bone-black); shoe-blacking	1.50
326.	Glue of all kinds; gelatine (animal and vegetable jelly); albumen and albumenoide, casein, caseum	1.50
327.	Starch-paste (dextrine, leiogomme), and other substitutes for glue, not otherwise provided for; paste, glue, flour-paste, and similar starch containing glues and finishing materials	1.20
328.	Starch, also starch meal	6.00
	NOTE.—Starch for finishing purposes on producing permit on condition and under control of respective regulations	1.50
329.	Ether, collodium, chloroform; carbolic acid, pure, chrystallized, and liquid; acid of vinegar, condensed (also pyroligneous acid, purified); phosphor and phosphoric acid; quicksilver preparations (also vermilion); yeast of all kinds, except wine lees; sugar of milk	10.00
330.	Tar pigments and artificially prepared organic pigments	10.00
331.	Chemical products and manufactures not otherwise provided for	10.00
332.	Sealing-wax, wafers, manufactures of jelly; inks and inkpowders	10.00
333.	India ink; blue-black crayon; lead pencils, red and colored crayons, set or unset; all colors in bladders, cases, shells, casks, or boxes	24.00
334.	Oil varnish (also boiled drying oils), without any admixture of resin, turpentine, or mineral oils:	
	a. In casks	3.00
	b. In tin cans, bottles, &c	10.00
335.	Lac-dye (with an admixture of resin, turpentine, mineral oil, or alcohol)	24.00
336.	Drugs, prepared, as well as all materials showing themselves by their inscriptions, labels, wrappers, &c., as medicines (also as medicines for animals), unless coming under goods with a higher tariff	24.00
337.	Articles of perfumery (perfumed vinegars, grease, and oils in packages of less than 5 kilograms; alcoholic, aromatic essences and waters; all fragrant substances and mixtures recognized as perfumeries by their packing, labels, directions for use, &c.; fumigating pastils; perfumed powder); rouges, cosmetics	50.00
	XLVII.—*Candles and soap.*	
338.	Pitch torches	1.50
339.	Tallow candles	6.00
340.	Wax candles, wax torches, wax tapers, night lights, wax matches	10.00
341.	Candles and manufactures of grease not otherwise provided for, for instance, out of stearine, spermaceti, palm oil, and paraffine	11.00
342.	Soap:	
	a. Ordinary	4.00
	b. Fine, *i. e.*, perfumed, or in cakes, balls, boxes, pots	15.00
	NOTE.—Oil soap, not perfumed, manufactured in Trieste and Fiume, will be entered under the prescribed conditions at half the duty paid by the most favored nations.	
	XLVIII.—*Explosive goods.*	
343.	Explosive goods, ordinary, *i. e.*, threads dipped in sulphur, matches, paper, matches; tinder, natural, soaked; tinder, artificial; touch-wood (natural and artificial); touch-wood paper	1.50
344.	Fireworks, fuses (quick-matches)	10.00
345.	Percussion caps, with fulminate	24.00
346.	Ammunition, *i. e.*, all explosive materials intended for or adapted to be used with firearms, also blasting material which contains the ingredients of gunpowder (saltpeter, sulphur, and charcoal)	*52.50
347.	All blasting and explosive materials not included in No. 346	*24.00

*Only by special permit.

XLIX.—*Objects of art and literature.*

		Florins.
348.	Books, printed matter, also almanacs, newspapers, and handbills; maps (scientific), musical publications, paper written on, documents, and manuscripts	Free.
	NOTE.—Almanacs, newspapers, and handbills being subject to stamp duty and control, their numbers, on entry, must be given.	
349.	Pictures on paper, *i. e.*, copper-plate and steel engravings, lithographs, wood-cuts, photographs, &c., chromotypes on paper or on canvas	Free.
350.	Paintings, *i. e.*, paintings on woods and on base metals, not varnished, on canvas and stone, also original pictures and drawings on paper	Free.
351.	Engraved plates of base metal, stone or wood	Free.
352.	Statues (also busts and figures of animals), as well as bas-reliefs and high-reliefs of stone weighing more than 5 kilograms; likewise statues, busts, and figures of animals, of metal or wood, but not less than natural size	Free.
	NOTES.—(1.) Bound books, pictorial works, &c., or maps and pictures pasted upon canvas or card-board, will be treated according to Nos. 348 and 349; if, however, the character of the bindings brings them under fancy goods, then such books or pictorials will be classed in the tariff as fancy goods. Bindings, maps, cartoons, and the like, into which books and pictures have been loosely laid or put, will be treated separately in accordance with the character of the material.	
	(2.) Framed pictures (No. 349) will be treated according to the material of which the frames are composed. In regard to paintings (No. 350) in frames, the latter pay duty separately, according to their character; in case separation appears impracticable, half of the total weight will be levied according to character of frame.	
	(3.) Objects upon which the pictures and paintings are placed simply as ornaments, or incidentally, and which in consequence cannot properly be regarded as pictures, but evidently serve ordinary purposes, will not be exempted from paying duty.	

L.—*Refuse.*

353.	Manure, animal and other, also artificial manure (not of salt compositions); ashes of wood and coal; bones, bone-ashes, ground bone, bone dust, suitable only for manure; raspings of horns and hoofs; blood, liquid and dried; animal sinews; residue from the manufacture of prussiate of potash; ammoniacal water (gas water)	Free.
354.	Bran; malt-germs; chaff; hard residue from the manufacture of fat oils, also ground; draff, swill, husks; wine-mother	Free.
355.	Refuse from the manufacture of glass, also glass which in melting overflows the hearth; pieces of broken glass and clay; refuse from the preparation of wax; refuse bathing and horse sponges; glove-makers' clippings; refuse from India rubber and gutta-percha manufactories, as well as old pieces of such fabrics	Free.
356.	Rags and other refuse for the manufacture of paper, *i. e.*, linen, cotton, silk, and woolen rags, paper cuttings (paper clippings), waste paper (written and printed), old nets, old ropes, and old cords; lint (linen-scraped)	Free.
	NOTE.—Refuse not otherwise provided for, and not adapted for other use, will be treated like the raw material of which it is composed.	

PART II.—EXPORT.

357.	Rags and other refuse for the manufacture of paper, *i. e.*, linen, cotton, silk, and woolen rags; also pulp (half-material, firm or fluid paper pulp), paper cuttings (paper clippings), waste paper (written and printed), old nets, old ropes, and old cords	4.00
	All other goods not enumerated here are free.	

JAMES RILEY WEAVER,
Consul-General.

VIENNA, *June* 17, 1882.

NOTES.

Emigration from Norway.—Consul Gade, of Bergen, says that—

The emigration to the United States, also, this year appears to be very lively and even larger than the foregoing year. From this port up to the end of March, have gone over, principally via Hull and Liverpool, 313 persons, and from Stavanger, within the same time, 699 persons, and I have no doubt that for the current quarter the number will be much more. These people come, for the most part, from the country districts, and in many cases leave their native homes with ample means for buying land in the Western Territories.

Customs Receipts in Austria-Hungary.—Minister Phelps, of Vienna, forwards the following summary statement of the customs receipts in Austria-Hungary for the first four months of the present year, during two of which (March and April) the duties chargeable under the new customs tariff were provisionally levied.

The receipts, including the premium upon gold, amounted to 16,040,224 florins, while in the corresponding period of the previous year they were only 10,925,281 florins. The large increase of 5,114,943 florins hereby exhibited cannot, however, be considered wholly as a result of the recent protective act referred to, since in anticipation of its operation very heavy importations were made. Whether such increase will become progressive is therefore problematical and can only be verified by future reports.

Of the above total receipts, 14,919,595 florins were collected at the Austrian frontier; 1,064,216 florins at the Hungarian frontier, and 56,413 florins in the occupied provinces of Bosnia and Herzegovina.

Cotton in Porto Rico.—Consul Conroy, of San Juan, writes to the Department of State, April 20, 1882, as follows with respect to the production and export of cotton from Porto Rico:

This island produces but a small quantity of cotton, as our agriculturists have neglected its cultivation, giving all their attention to other products, such as sugar, coffee, tobacco, &c., in fact, only in a few districts some insignificant parcels are gathered, which are generally exported.

There are no cotton factories, mills, nor any woolen industries in this country, the little quantities of the plant that are collected being destined, as already mentioned, for outward shipment; and as no reliable statistics concerning the said plant have been published of late, owing undoubtedly to the insignificance of the quantities exported, this consulate is unable to give any accurate information as to the destination of the trifling parcels that now and then are sent abroad, which, in the whole, would be of no consequence.

Sailing Directions for the Port of Bahia-Blanca.—Consul Baker, of Buenos Ayres, transmits the following to the Department of State, under date of April 12, 1882:

On the 13th of October last I reported to the Department the establishment of a lighthouse, by the Argentine Government, at the entrance to the bay of Bahia-Blanca, on the South Atlantic coast.* I now inclose a translation of the sailing directions for entering the port of Bahia-Blanca, by Lieutenant Howard, of the Argentine navy. These directions are official, and they will be found interesting not only to ship-masters, but all others who are seeking new outlets for our foreign commerce.

Bahia-Blanca, as I have heretofore reported to the Department, is really the only port on the coasts of the Argentine Republic with water sufficient for the entrance of sea-going vessels; and with a rich grazing country back of it, which is already dotted with extensive cattle and sheep farms, it is destined to attain to considerable commercial importance. I may add that it will soon be united by rail with Buenos Ayres

*Published in No. 14 of Commercial Reports, pages 724, 725.

the extension of the Great Southern Railway from its present terminus at Azul to Bahia-Blanca now being in rapid process of construction; and this must give a great impetus to its trade, as the outlet of all the southern portion of the province of Buenos Ayres and Northern Patagonia. By arrangement with the Liverpool steamers of the Lamport & Holt line the materials for this extension are in great part to be delivered at Bahia-Blanca instead of Buenos Ayres.

The Argentine National Government has already taken steps for the building of a mole and other necessary conveniences for the loading and discharge of cargo.

French wines and brandies.—Consul Glover, of Havre, writes under date of April 28, 1882, as follows, respecting wine and brandy, products of France:

It is very difficult to arrive at a just conclusion in regard to the amount of falsified wines and liquors shipped from this consular district to the United States. My opinion is, however, that a very large percentage of such products is either adulterated by the introduction of deleterious drugs, or the mixing of a low grade of Spanish wines.

While I am hardly prepared to say that such falsification would call for the absolute prohibition of importation into the United States, I am quite sure that our government would be justified in instituting a rigid inspection of all wines and brandies exported from this country.

France still continues her unjust discrimination against American pork, so that merchants of this city are returning considerable quantities of bacon to Chicago and other places.

Although the French Chamber of Deputies voted that microscopic examination was unnecessary, it was also voted that the whole matter should be left to the discretion of Minister Tirard, who is, as I understand, the author of the original edict. It follows, therefore, that the last state of our hog is worse than the first!

No merchant can afford to ship American bacon to this country so long as it is subject to microscopic inspection by so-called French experts. The zeal manifested by some French deputies in regard to the exclusion of our hog product is entirely unwarranted by any facts bearing on the matter. The truth is, that there has never been but one well-attested case of trichina in France, and that was from a hog born, bred, and fed in this country.

The Government of the United States can hardly afford to submit to so unjust a discrimination against American products; and it is gratifying to know that the Department of State is so actively pressing the matter on the attention of the French authorities.

The general silk harvest.—Consul Peixotto, of Lyons, reports upon the general silk harvest to the Department of State, under date of June 22, 1882, as follows:

France.—The harvest is terminated, and the result as predicted in previous dispatches has been as a whole very satisfactory both in quality and quantity.

Italy.—The crop is estimated as from 30 to 40 per cent. inferior to last year.

Levant.—In spite of unfavorable season, the harvest promises equally good results with that of 1881, and in quality a marked superiority.

Spain.—A fine crop as to quality, and superior in yield to last year.

China.—The export crop will exceed 75,000 bales.

To sum up respecting the French and Italian silk crops which lie nearest and fall more directly under the observation of this consulate, I may be permitted to remark that the sudden close of the French harvest has not been without surprise to some of the great buyers who were confident in a larger yield, whereas in reality there has not been, so far as quantity is concerned, a very considerable excess, and the crop of the present year and that of 1881 may be considered as the maximum which can be hoped for, regard being had to the immense reduction in the growth of mulberry trees since several years. But this maximum is not likely to decrease, if the present prices for cocoons can be maintained, of which there is every likelihood, and which are fairly remunerative.

Prices for cocoons have ranged from 4.30 and 4.40 to 4 50 and 4.66 francs the kilogram for the best qualities, and have exceeded these prices in some instances.

The Italian cocoon markets have, during the past week, been very animated; the decreased production of the present season has been each day more clearly established, the late cold and unfavorable weather having caused serious damage in Piedmont, where the crop is estimated as falling short one-half from ordinary years.

The prices of cocoons are very firm, with an upward tendency in the Peninsula. In Tuscany and in Piedmont yellow cocoons, first choice, command readily 5 to 5.50

francs, and even a higher figure in some localities. In Lombardy 4.50 to 4.90 francs the kilogram is paid.

Considered as a whole the general deficiency of the Italian silk crop is, according to latest advices, estimated at 40 per cent. Notwithstanding these reports I still incline to the belief that the deficit of the silk crop in Italy will not exceed 25 per cent.

The silk-goods market of Lyons has little animation at the present moment, the news from the United States and England being unfavorable.

American vines in Italy.—Under date of June 16, Consul Crosby, of Florence, reports to the Department as follows concerning the American vines in Italy:

In my dispatch dated May 2, 1882, published in Consular Reports No. 20, for June, I reported the appearance of the phylloxera among the American vines in the government nursery, on the island of Monti-Cristo, and I now beg to give further details on this subject.

It has been ascertained that of the American vines imported into Italy, the Isabella and Taylor did not resist the attacks of the phylloxera as well as others. The minister of agriculture, on the 5th of March, 1881, issued an order, which was made a law on the 14th of July following, directing that special attention and care should be used by all agrarian committees, horticultural establishments, and private parties, for the reproduction of all vines from foreign countries, especially those of America, which had withstood the attacks and ravages of the phylloxera, and it was suggested, in order to secure disinfected vines, they should be raised from the seed and cuttings (or sale) of American and other hardy vines, as it was thought that the cuttings or sale, after the vines had lost their leaves in the autumn, would not have about them any phylloxera germs or eggs. Several quintals of American cuttings were placed in a nursery apart for purposes of experiment. Dr. Cavazza, who had been at the Agricultural School of Montpellier, France, studying closely the cultivation of American vines, was requested by the agricultural department of Italy to select and purchase, after disinfection, the best cuttings of foreign vines, and bring them to the island of Monte-Cristo for transplanting. The Island of Monte-Cristo is situated in latitude 42° 8′ in the Mediterranean, and 32 miles form the island of Elba, inhabited only by a penal colony, having few natural vines, and being almost entirely cut off from communication with the outer world. Some 150,071, cuttings were selected, at a cost of 20,968 francs, from the following variety, viz: Riparia selvatica, Taylor, Clinton, Vialla, Solonis-York-Maderia, Jacquez, Cuningham, Herebemont-Roulander (Louisiana). But unfortunately, as reported in my dispatch before referred to, this nursery was found infected by the phylloxera, and the vines were all destroyed by fire.

As the result of these experiments, carried out under the instructions of a committee of scientific and practical experts appointed by the Italian Government, they find that "there is great danger in importing American vines in any manner into Italy," but they urge the immediate importation of American seeds, with which in time they hope to secure a lasting benefit, without the danger of introducing the phylloxera itself.

Conventional rates of duty in France.—Consul Peixotto, of Lyons, reports as follows:

The duties established by the different conventions for agricultural products other than wines have already been reported to the Department. The former conventional tariff on wines of 3.50 francs is now replaced by the treaty with Spain to 2 francs per hectoliter, casks included; that is, for wines of all sorts not exceeding 15°. Each degree above 15° is taxed 30 centimes additional.

The duty of 2 francs now becomes the uniform conventional duty to be applied in virtue of the general clause to the "most favored nation"; that is to say, in accordance with the treaties made and concluded between France and the above and forementioned countries, and, in consequence, Italian, Spanish, Austrian, and Hungarian wines. The same applies to German wines, Germany profiting from the famous treaty of Frankfort, concluded after the last war, and Turkey, with which country the treaty is still in existence.

The wines of other countries, Greece for example, continue to pay the duties imposed by the new general tariff, viz, of 4.50 francs.

Respecting the additional charge for warehousing, it will remain the same as heretofore, *i. e.*, at 3.50 francs the 100 kilograms.

It should be understood that the duty of 2 francs relates to pure wines and not to those adulterated.

Alcohol, which formerly under the conventional tariff paid a duty of 15 francs, is now subjected under the new general tariff to a duty of 30 francs per hectoliter for

pure alcohol for brandy, otherwise than in bottles. This high duty was exacted because the principal country supplying this article is Germany. Other countries have therefore to suffer, as France (in view of the Frankfort treaty) refuses to disarm in this economical question, as in the materials of war, vis-à-vis her late enemy.

The alcohols of all countries have thus to pay a uniform duty of 30 francs the hectoliter on entering France.

Liqueurs under the new law pay 30 francs under the conventional and 40 francs under the general tariff.

As to wines, in view of the increasing importation of wines manufactured from dried grapes, the duties have been very considerably advanced. The heretofore existing duty of 30 centimes (6 cents) per 100 kilos from which Portugal and Turkey have so largely profited, is now advanced by the new treaties with Spain and Portugal to 6 francs the 100 kilograms by the general tariff.

Great Britain, with whom until now it has been impossible for France to make a new treaty, will hereafter pay duties under the new general tariff with the resource in her favor of the clause for the nation the "most favored."

There is still the question of resumption of negotiations, and it is believed a commercial treaty between the two countries will sooner or later be concluded.

Shipments of lace and hosiery to the United States.—Consular Agent Smith, of Nottingham, reports as follows, under date of March 9, 1882, to the Department of State, on the declared value of lace and hosiery to the United States for the months of January and February:

The declared value of merchandise shipped to the United States through this office (principally lace and hosiery) during the months of January and February of this year was as follows:

January, 1882	$1,094,402 85
For the corresponding month, 1881	894,618 00
Showing an increase of	199,784 85
February, 1882	912,069 00
February, 1881	878,004 00
Showing an increase of	34,065 00

The report of the board of trade and navigation just issued shows that the exports of lace goods and hosiery from the United Kingdom to all countries during the first two months of this year, as compared with the corresponding period of last year, to have been as follows:

Two months, 1881:	
Lace and patent net	$1,977,828 00
Silk lace	134,407 00
	$2,112,235 00
Two months, 1882:	
Lace and patent net	$2,575,029 50
Silk lace	260,819 50
	2,835,849 00
	2,112,235 00
Showing an increase of	$723,614 00

The exports of cotton hosiery for the two months were as follows: For 1881, $924.654.90; For 1882, $1,116,554.50; showing an increase of $191,890.60.

The exports of woolen hosiery were as follows: For 1881, $187,579; for 1882, $283,984; showing an increase of $96,405.

Cotton yarns and thread in Mexico.—Consul-General Strother reports as follows concerning the manufacture in and importation into Mexico of cotton yarns and thread:

Cotton yarns are manufactured in Mexico to a limited extent, and a mill of 300 spindles for the manufacture of cotton thread has recently been established near Orizava, but is not yet in operation.

The importations of cotton yarns from England are of Nos. 20, 22, up to No. 30, and

only of such numbers as cannot be manufactured in this country. There is also a red cotton yarn imported from the Rhine provinces in Germany.

These yarns are imported for manufacturing purposes, being woven into zarapes and rebogos, and also to supply the knitting mills where stockings and knitted undershirts and drawers are manufactured.

The cotton thread imported is chiefly from England, although a considerable proportion, especially of the lower grades, comes from Alsace and the other Rhine provinces of Germany. The thread, both white and colored, is used exclusively for sewing, never for weaving. Thread, white, black, and colored, is imported wound on reels of 100, 200, and 500 yards, of the following numbers: Nos. 8, 10, 12, 16, 18, 20, 24, 26, 30, 36, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, 150, 180.

The English makers in best repute are Jonas Brooks & Bros., Alexander & Co., Clark & Bro., Clark & Co., and other firms under the name of Clark. The best known trade-marks are the anchor and the goat's head.

The German manufacturers have imitated the goat's head, and although the English house of Brooks & Bros. have expended large sums in prosecuting them, the fraud still continues.

The introduction of American thread into this market has been only of recent date, through the Wheeler & Wilson Sewing Machine Company, who have the exclusive agency for its sale in the republic.

Notwithstanding the immense number of American sewing machines sold in Mexico, and positively asserted superiority of American thread, it does not compete successfully with the English article, which, having been longer known, is preferred simply from habit. The Mexican tariff on cotton thread is 14 cents per dozen spools up to 275 meters. The 100 and 200 yard spools pay this duty, but the spools of 500 yards are charged proportionately.

Imported threads are generally glazed, and are of three and six cords, mostly of the latter. The retail prices in Mexico are as follows: 100-yard spools, per dozen, 37½ cents; 200-yard spools, per dozen, 62½ to 65 cents; 500-yard spools, per dozen, $1.50 to $1.62½. A considerable quantity of thread in balls is also imported from Great Britain, principally from the house of Alexander & Co., of Glasgow. Thread balls per dozen, 12½ cents.

The English goods are all imported through commission houses of London, Liverpool, Manchester, Birmingham, and Glasgow—never directly from the manufacturers. With this imperfect report I inclose some samples of English yarns and thread.

The Austro-Hungarian harvests for 1882.—Consul-General Weaver, of Vienna, reports to the Department of State, under date of June 3, 1882, as follows:

The latest informations show that the approaching grain harvests of Austria-Hungary will be very satisfactory, equaling generally, and surpassing in some districts, the average harvests both in quantity and quality. In cereals, rye alone has been injured to any considerable extent by the frosts through the month of June, and hailstorms have been limited in their appearance to few localities, so that, unless injured by the floods or excessive wet weather in harvesting, a large surplus export from this country, particularly of barley, may be expected.

The production of wheat in this country, amounting to an average of 128,000,000 bushels for Austria-Hungary, barely supplies the demand, although during the last decade about two per centum of the crop was left for clear export; that is, after subtracting the imports from the total exports of wheat. The recent movements of wheat were not so favorable, as may be seen from the following table showing the imports and exports of wheat in Austria-Hungary during 1880–'81, and the first three months of 1882; the amounts given in tons of 1,000 kilograms:

Period.	Imports.	Exports.
During 1880	247,221	205,973
During 1881	224,611	201,559
First three months, 1882	65,429	31,397
Totals	637,261	438,929

Showing during the last twenty-seven months an excess of imports of wheat to the amount of nearly 2,000 tons.

The effect of the new tariff of entry duties, which taxes imports of wheat with approximately six cents per bushel, will be to restrict the amount imported, doubtless the design of the law, but the effect upon

the clear export cannot be great. The price of wheat has varied but little during the last three months, being quoted at present writing from 9.30 to 10.20 florins per hectoliter (2⅘ bushels), according to quality.

The phylloxera and the frosts have for several years previous reduced the grape harvests to less than half a crop, but the vines for this year present an unusually promising appearance, so that great hopes are being entertained. From recent experiments with American vines, which have so far been successful against the ravages of the phylloxera, more extensive importation of these vines will be made in the immediate future on account of their powers to resist the attacks of this noxious insect, which threatens to destroy the wine industry of this country as well as that of France.

Merchant marine of Austria-Hungary.—The following statistics showing the number, tonnage, &c., of the Austro-Hungarian merchant marine have been forwarded by Consul Thayer to the Department of State, under date of April 21, 1882:

TRIESTE OR TERRITORY.

	Numbers.	Tons.	Crews.	Horse-power.
Steamboats	98	66,458	2,493	18,055
Ships	3	3,191	42	.....
Barks	48	25,342	497	.....
Polaccas, cutters, &c	2	301	12	.....
Brigs	11	3,979	97	.....
Brigantines	4	1,178	33	.....
Schooners, luggers, &c	14	1,512	66	.....
Trabacolos, &c	18	648	67	.....
Fishing-boats, lighters, or boats under 10 tons	438	1,275	749	.....
Totals	636	103,884	4,056	18,505

ISTRIA OR GUARNERO.

Steamboats	3	57	11	70
Ships	4	4,708	59	.....
Barks	73	41,380	784	.....
Polaccas, cutters, &c	.....	.....	.....	.....
Brigs	22	8,261	194	.....
Brigatines	5	1,392	37	.....
Schooners, luggers, &c	38	8,748	239	.....
Trabacolos, &c	230	6,697	789	.....
Fishing boats, lighters, or boats under 10 tons	1,428	5,149	3,808	.....
Totals	1,803	76,392	5,922	70

GORIZIA OR GRADISCA.

Steamboat	1	19	3	10
Trabacolos, &c	55	573	166	.....
Fishing boats, lighters, and boats under 10 tons	336	1,488	725	.....
Totals	392	2,080	894	10

DALMATIA.

Steamboats	4	144	20	84
Ships	2	1,662	27	.....
Barks	82	46,381	868	.....
Polaccas, cutters, &c	5	155	17	.....
Brigs	6	2,127	46	.....
Brigantines	5	1,549	44	.....
Schooners, luggers, &c	28	4,092	155	.....
Trabacolos, &c	334	8,394	1,055	.....
Fishing boats, lighters, or boats under 10 tons	4,637	12,761	11,810	.....
Totals	5,103	77,285	14,042	84

HUNGARY OR CROATIA.

	Numbers.	Tons.	Crews.	Horse-power.
Steamboats	6	181	31	105
Ships	2	1,415	26	.....
Barks	91	47,027	987	.....
Polaccas, cutters, &c	3	25	8	.....
Brigs	20	7,506	187	.....
Brigantines	15	4,406	123	.....
Schooners, luggers, &c	14	4,116	104	.....
Trabacolos, &c	39	1,533	168	.....
Fishing boats, lighters, or boats under 10 tons	281	939	631	.....
Totals	471	67,148	2,265	105

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COMMERCIAL RELATIONS OF THE UNITED STATES.

23330

REPORTS

FROM THE

CONSULS OF THE UNITED STATES

ON THE

COMMERCE, MANUFACTURES, ETC.,

OF THEIR

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CONSULAR REPORTS

ON

COMMERCE, MANUFACTURES, ETC.

AUGUST, 1882.

AMERICAN TRADE IN SWITZERLAND.

REPORT BY CONSUL MASON OF BASLE.

As a principle it may be stated that the introduction of American manufactured products into Switzerland can be accomplished only by the same means that are employed for a like purpose at home. The goods must be advertised, intelligently exhibited, submitted to purchasers for inspection and trial—in a word, the business, whatever it is, *must be pushed*, as Americans are accustomed to push their trade at home, and in whatever foreign countries they have obtained a footing. Agents who speak French and German, and who are familiar with Swiss notions and methods of doing business, should be sent here to exhibit samples and solicit orders. When such orders are secured, they should be filled promptly and with perfect good faith as regards quantity and quality. The bad effects of some unfortunate precedents in this respect will have to be lived down, but this can be done if the effort is made in the right way. Agents who come to represent American houses should be able to give prices at which the goods can *be landed* at the nearest seaports, viz, Antwerp, Havre, Rotterdam, Bremen, and Genoa. The Swiss merchant is by temperament and education conservative, and as Switzerland has no seaports or merchant marine, he prefers to have the contingencies of ocean transportation as far as possible eliminated from his commercial calculations. It would also be advantageous for American exporters to consign experimental invoices of their wares to established dealers here. Such a consignment would serve as an introduction for their goods, and would be naturally followed, if the experiment proved successful, by purchase orders from the consignee. Swiss manufacturers consign millions of dollars worth of their goods to American houses annually; shall they surpass our own exporters in the enterprise which seeks out and develops new markets?

Advertisements, circulars, the labels on goods for this market, should be printed in French or German, otherwise they have almost no value whatever. The pamphlets, circulars, and other advertisements of American guns, sewing machines, agricultural implements, &c., printed in English, which are sent so profusely to the American consulates in Switzerland, are difficult to use with any real advantage, for the obvious reason that the persons whom they are expected to influence cannot

read them. But I know of no instance in which an intelligent, systematic effort has been made to introduce here a deserving article, adapted to the wants of this country, without attaining a satisfactory result. Among these instances of complete success may be mentioned a certain American sewing machine company, which not only has an agency in every principal city and town, but its illuminated posters, often glazed and framed, meet the eye in almost every Wirthschaft and public waiting place in Switzerland and Germany. As a consequence, that company practically possesses this territory so far as the sale of sewing machines is concerned. Its agencies are managed by natives who not only give instructions as to the use of the machine in the local dialect, but conform their system of doing business to the established usages of the place. Similarly there may be cited as an illustration of the right way to do a thing the course of a leading railway company of Wisconsin in securing a large and choice share of the German and Swiss immigration of the past two or three years. Like many other railway corporations in the Southern and Western States, this Wisconsin company has large tracts of timber and farming lands adjacent to its line, which it desires to sell to actual settlers who will occupy and clear the land, and, by making it productive, add to the local business of the road.

Instead of merely sending out circulars, or placing agents at New York to offer inducements to the needy and undecided class of immigrants who land in America without any definite purpose or knowledge as to where they wish to go, the managers of the Wisconsin road sent over to Europe two years ago an active, intelligent man, duly accredited by the State authorities, fully informed as to the resources of his State, and capable of telling Germans and Scandinavians in their own languages all that they desired to know. He did not advocate especially any emigration agency or line of transatlantic steamers, but he gave to all inquiries full and trustworthy information about the State of Wisconsin and the lands of the railway company which he came to represent. As a consequence Wisconsin received last year about forty-one thousand of the very best of the immigrants who landed in the United States, and her proportion of this year's contingent will be still greater.

Coming back to the question how and in what lines the export of the United States with Switzerland may be increased, the most obvious and direct plan would seem to be that already recommended in various other consular reports, and confirmed by actual experience on a small scale, in certain other countries, viz, the combination of several manufacturers or exporters of different classes of merchandise of popular use to establish depots or agencies in the principal cities to exhibit, recommend, and supply their various wares.

There is, in the first place, a rich and ready field here for the introduction of various kinds of hardware, such as spades, hoes, spring balances, clothes wringers, and various mechanic's tools of improved patterns and superior quality. The Swiss woodsman's ax is a notably awkward and ineffective implement, and might, it would seem, be gradually replaced by the keen, broad, thin-bladed ax that has vanquished the forests of the New World. For the larger agricultural machinery, mowers, reapers, cultivators, seed-drills, and steam thrashers, there can never be in this country more than a limited and uncertain demand. Swiss labor is too cheap and land too dear, its agriculture is conducted on too small a scale too justify such expenditures, even if the people were educated up to them. But whoever should introduce here the American steel subsoil plow would confer a blessing upon Switzerland, though

it is by no means certain that the lesson would be accepted with sufficient readiness to become profitable to the teacher. The present system of Swiss plowing is, with occasional exceptions, a mere superficial skimming, with a rude plow, of a soil which requires constant surface manuring to retain its fertility.

The domestic cooking stove in common use here is a monument of costly inutility, designed generations ago, with apparently the single purpose of utilizing to the last possible limit a scant supply of finely split wood as fuel. Railroads have now brought the bituminous coals and coke of Lorraine and Belgium within reach of the more independent classes in this country. A very few of the more enterprising have ordered cooking and heating stoves from England, but there is as yet no general and adequate response to the need of cheap and judiciously constructed stoves, capable of burning coal, coke, and wood, and arranged with reference to the utmost economy of fuel.

Switzerland imported during 1881, 3,127,800 pounds of leather and shoes in excess of her exports of the same products. The ready-made shoes sold in this country are generally clumsy in shape, poorly made, and costly. When their poor quality is taken into account, it would be an interesting and probably a successful experiment to offer to the trade here, through a competent agent, some of the best grades of American machine-made and hand-sewed boots and shoes, which combine beauty of form with reasonable cheapness and durability. The Switzer is an eminently conservative and careful purchaser; he does not, as a rule, take readily to new ideas, but his economy is discerning and intelligent, and he only needs an opportunity to accept any improvement that will him a better result for his hard-earned money.

With respect to food products, our enterprising exporters have already attained a strong footing in this republic. American hams, shoulders, bacon, and lard have come through the last year's siege of misrepresentation and detraction successfully, and are thoroughly established. Such consumers as still object to purchasing and eating American meats under their proper names have the privilege of paying 20 centimes per pound more for the same meats after they have been put through the form of resalting and smoking in this country, and have been rechristened as German or native Swiss meats. The quantity of "*Bernerspeck*" and "Westphalian" hams which are contributed to this market by Chicago, Saint Louis, and Cincinnati would be surprising to the consumers if it were known. Within the past year the carefully-prepared Gloucester codfish, has been introduced here, and by reason of its higher quality and more attractive appearance has almost wholly supplanted the North Sea codfish, which previously had no rival in the same field. Canned meats, fruits, and vegetables from the United States are in high favor; steamed oatmeal and cracked wheat and the various grades of molasses and syrups are apparently recent discoveries in the domestic economy of Switzerland. With proper energetic management it would seem that the use of all these articles might be indefinitely extended.

For all these lines of trade the question of successful importation from the United States is dominated largely by the items of transportation and import duties. In respect to the former of these, this country has been placed in new relations to the outside world by the opening of the St. Gothard Railway, which makes Genoa the nearest and most available seaport for Switzerland. By the new St. Gothard route, Genoa is 423 kilometers from Lucerne, the center of Switzerland, while the distance by rail from Lucerne to Antwerp is 704 kilometers, and to Havre

851. From Lucerne to Genoa, via the Mont-Cenis Tunnel—the only available railway route hitherto—the distance is 620 kilometers, so that the opening of the St. Gothard practically brings Switzerland 200 kilometers nearer to a seaport than she was before. Moreover, the relations between Switzerland and Italy are very close and cordial, and the managers of the St. Gothard are offering every possible inducement in respect to rates and facility for travel and transportation. Genoa has direct steam communication with New York three times per month, and the rates of freight to New York offered now by leading transportation firms are the same as those to London and Liverpool for second-class freights, and only 10 per cent. greater for first-class. With her importance as an *entrepôt* so largely improved by opening of the St. Gothard, the facilities of Genoa for ocean transportation will no doubt be rapidly developed. It may not be too much to even hope that at some future time our country may have a merchant marine of its own to bring American products to places where they are wanted, and among these places a prominent and promising one will be Genoa, the enterprising commercial capital of emancipated and regenerated Italy.

The general import tariffs of Switzerland are light, and maintained wholly with a view to the federal revenues. The rates levied upon the articles which most directly concern American exporters are as follows, the unit of quantity being the meter centner, or 100 kilograms, equal to 220 pounds:

General import tariff per 220 pounds.

Wheat, corn, and all other cereals	$0 05
Flour	20
Meats, salted or smoked	80
Fish, salted or dried	80
Fruits, dried or preserved	07
Fruits, fresh	free.
Sugar	1 40
Sirup, colorless	1 40
Sirup, raw, brown, and molasses	60
Tobacco, leaf and stems	5 00
Tobacco, in twists	6 00
Tobacco, smoking	1 00
Snuff	1 00
Cigars	2 00
Cigarettes	2 00
Leather, uncolored	80
Leather, colored and enameled	1 40
Boots and shoes, coarse	3 20
Boots and shoes, fine	6 00
Iron and steel in bulk	12
Iron and steel implements, polished, painted, or varnished	3 20
Machinery and castings	80
Agricultural machinery	80
Raw cotton	12
Cotton waste	12
Cotton yarns, raw	08
Cotton yarns, bleached or colored	14
Cotton fabrics, colored or printed	3 20
Wool, raw or combed, waste, &c	12
Woolen yarn, raw, uncolored	80
Woolen blankets	1 40
Woolen cloths, colored and dressed	3 20
India rubber goods	3 20

In the nature of the case, the extension of American trade in an old and conservative country like Switzerland must be in opposition to strong local competition and more or less prejudice, but there is no

reason why persistent and intelligent efforts, even in this well-worn field, should not prove successful and in the end profitable.

FRANK H. MASON,
Consul.

UNITED STATES CONSULATE,
Basle, July 24, 1882.

AMERICAN TRADE IN MADAGASCAR.

REPORT BY CONSUL ROBINSON, OF TAMATAVE.

Trade continues at this port about the same as during the three or four years last past, the only changes worthy of note being a stronger competition for the purchase of the two dominant productions for exportation—rubber and dry-salted hides, and at the present moment a little better price for American unbleached cottons.

Since the commencement of this year the competition for these productions has been sharper than I have seen at any time during the previous six years; consequently the prices for these articles are now ruling high on this coast.

As a rule, it requires either cash or the American unbleached cottons to purchase these productions in this market, and as the European traders have found they could not compete with the Americans for them with European goods, they have taken to importing European silver 5-franc pieces, to purchase with, which is probably the main cause of this spirit of sharp competition and consequent high prices. However, the Americans are still getting their full share. The value purchased since the 1st of January (four and a half months) for exportation to the United States, already sent and on hand for the next vessel, amounts to more than the exports to the "States" for any one whole year of the previous six years.

During the same period the sales of American cottons have been a little dull and the prices low, until the last few days; but they are now going up a little, owing to the small stock in the market; yet many are expecting to see trade dull during the remaining months of the year on account of certain political matters which I shall explain further on.

I am now in regular monthly communication with the consular agencies of Mojunga and Andakabe by my line of couriers. From the reports I get from our agents I see that American trade is increasing on that coast, and, further, that it fluctuates less than on this.

I have also received, from the same source, some statistics of the trade over there, and information upon the present condition and resources of that side of the island, and the prospects for greater expansion of our trade in that direction, which will be given in my forthcoming annual report. These couriers are also proving to be useful to the American traders in giving them facilities for regular correspondence between their posts.

The government is still occupied in organizing, equipping, and drilling the army. They are now preparing to carry out the measures on the west coast promised in connection with the revision of our treaty, as per the letter of the prime minister to our Secretary of State, which was sent with my dispatch No. 82, forwarding the protocol of revision. The agent of the government at this port for their bark (the Zantananarivos) says he has received orders to be prepared with supplies for the full load

of soldiers to be taken on board that vessel for the west coast as soon as she returns from Bourbon, whence she is daily expected, and to continue providing for subsequent trips, as she will continue making the trips as fast as they can be made, until the number of troops required to garrison all the new posts shall be forwarded from this port.

The government has just received from the United States 2,500 improved breech-loading rifles, with cartridges to fit, and another like quantity from some contractors is expected in July.

This movement of troops is expected to interfere for some months to some extent with trade between this port and the capital, and when these troops march the baggage bearers and camp followers make about as strong a force in numbers as the armed soldiers. So it will be impossible for the time to find bearers for merchandise, to say nothing of the difficulty such bearers would have to obtain food en route, after the dearth that will be made by the troops.

Another drawback to trade is going to be caused, it is feared, by the rampage of a French journal, a little four-page sheet, published at this port, and claiming to support the interests of Europeans in Madagascar. Two weeks ago this paper published a leader containing what the editor said was the substance of remarks made by the commandant of the French war steamer, the Forfait, to the governor of Tamatave as representative of the Queen; the Forfait had just arrived at this port. The purport of the article, both as to what it claimed to be the substance of the commandant's remarks and the comments of the editor, was that this government had been intriguing with the Sakalava people living at certain points on or near the west coast (I have not been able to ascertain to a certainty whether the places referred to are small islands near the coast or portions of the mainland), which are, the editor says, under the protection of the French flag. That the Queen's emissaries had tried to persuade those people to raise the Queen's flag and acknowledge her sovereignty and that the commander had been sent by his government to demand from the Queen's government a promise not to meddle in the affairs of those people again; and also that article 85 of the code of laws published in March, 1881, by the Queen should be repealed as to the French (this article 85 prohibits the sale of land to foreigners); and that he should return from Bourbon on or about the 9th of June to receive such promise, making the threat that if not given he should enforce it with arms. The editor's comments were not only severe against the native government, but very insulting; so much so that I, upon reading the article, supposed it to be the ebullition of a drunken spree. Since the departure of the Forfait the noise is that five French armed steamers are coming in June to bombard Tamatave if this government does not concede to these demands, and the French are going to take possession of the west coast. This bluster originates with the creole French residents.

I believe, of course, that there is very little foundation for it—have had too long acquaintance with that sort of a gasconade from these French creoles from Bourbon—but it is going to affect trade, seriously I fear, for some time. The Hova wholesale traders, who come to this port and purchase of the foreign importers, are frightened for the safety of their capital at the least noise about political difficulties, and prefer to bury their money to risking it in goods at such times. Two or three years ago trade was killed here for some six to nine months by Mr. Cassas' (the French diplomatic agent) quarrel with this government.

The French island of Réunion (formerly called Bourbon) is overpopulated with an impoverished people, who is constantly casting a covetous

eye upon Madagascar; and that people, with its local officers, and the ambitious local officers of the French islands of St. Marie, Nosi-be, and Mayote, together with the French creole residents in Madagascar, are, and have been during the last three years, playing all their cards in an effort to draw the French Government into a quarrel with the Government of Madagascar, hoping, as they have nothing to lose themselves, to gain, as result of such quarrel, a slice, if not the whole, of this island to the possession of France, for them (these creoles) to colonize. To carry out this policy the Bourbon journals have been filled with unreasonable and exaggerated complaints about the bad treatment foreign residents—especially the French residents—were receiving at the hands of the Queen's Government, and the lack of good faith on its part toward the French treaty. A correspondent at Nosi-be of the little journal above mentioned as published here writes in the same strain (this correspondent, it is said here by those who pretend to know, is the governor of Nosi-be), and of late this paper has joined in the same chant. On the arrival of every new French diplomatic agent or French naval officer these complaints are dinned into his ears by these people. Up to the time of this last affair I have not believed this blustering would deceive the French Government. In fact, Commander Vallon (commander of the French fleet in these waters, and a sound old man), when here, just after the "Cassas quarrel," caused all the French residents to be assembled before him, and gave them a very severe blowing up for this same kind of conduct, and the lesson had the effect of keeping them silent for some months; but after that the same chant was commenced again, with this last affair as result. As to its going farther I am uncertain, and equally so as to the French Government's authorizing the proceedings of the commander of the Forfait.

W. W. ROBINSON,
Consul.

UNITED STATES CONSULATE,
Tamatave, Madagascar, May 22, 1882.

AMERICAN TRADE AT MATAMOROS.

REPORT BY CONSUL SUTTON.

The six months ending March 31 last, show very few important changes in trade. Everything here is now and has been for about a year in an undecided condition.

The new railways to the frontier and those building from the Mexican side to interior are making the routes of trade to and from the interior very uncertain. It has been feared by the merchants in this section that the action of the Palmer-Sullivan combination in pushing their line from Nuevo Laredo to Monterey, while working very slowly, and for the most part not working at all on the route from this city to Monterey, would turn the bulk of the trade of this section to Laredo. If the company can be induced to push the road from this city, this section will not only hold its former trade, but will largely increase it. At the present writing work on the road is being pushed, material is arriving, and merchants are more hopeful.

In spite of all the fears, the totals of the imports for the half year here given do not show noticeably any falling off as compared with the last corresponding half year. In the imports of American goods there

is a decrease of $56,868, from $646,521 to $589,653, while in European goods there is an increase of $11,661, from $531,489 to $543,150. This makes a decrease in the total for the two corresponding half years of only $45,207. So small a change shows nothing in a country where the volume of trade fluctuates so greatly and is so affected by changing conditions. It remains to be seen, however, whether the next half year will show as good a total. It is probable that, while the value of the imports here has not changed, the imports at Nuevo Laredo have considerably increased, and that of this new business Matamoros is not getting her share.

The business men of this section are fully alive to the needs of the situation and will help any effort to retain their trade. Considerable reductions in freights and other charges have already been made, these now being, I am told, as low, and in some cases lower, than via Corpus Christi and Laredo. The through railway has, of course, the advantage in time, and will draw considerable trade unless this railway is built rapidly up to Reynosa and Mier. There is, however, a large foreign trade which will still come this way and go via rail and carts. These are goods where the advantage in freights will more than compensate for a week's delay on the route.

It is thought by some, as Mexico cannot afford to be without a railway from the interior to her frontier Gulf ports, that President Gonzales, who is a native of this State, having been born near this city, will soon take energetic measures to have a road to the interior pushed to completion.

The opening of railways from the frontier into Mexico will necessitate some provision in the Mexican tariff for more speedy dispatch of goods and the abolition of the annoying and useless checks of one office and one set of officials against each other. It is understood that a Mexican commission is now in the United States studying the subject, and that the President has been authorized to prepare and proclaim such new rules as may be adopted.

One point which would greatly facilitate commerce would be to have goods allowed to go through the rail to the interior without breaking bulk or inspection, under such bonds and supervision as might be necessary.

Another would be to allow importation on what might be called a "general permit," depositing said goods in the government warehouses, under guard, and allowing the merchant from five to fifteen days to examine and declare his goods. He might give a general bond to do this and to secure the duties, when taking out his "general permit," and pay a warehouse fee of, say, 4, 6, or 8 cents per barrel for five, ten, or fifteen days, besides the charges for permits and stamps. By this means the merchant could import his goods without stopping them on the American side to open, examine, classify, measure, and list every article according to the exacting terms of the Mexican tariff. Of course, such a method would entail no loss of revenue to the government, while it would enable the Mexican merchant to examine his goods carefully without going to the American side. By this plan he would save expenses on the American side, and he would be less apt to incur fines and penalties by errors in declarations.

WARNER P. SUTTON,
Consul.

UNITED STATES CONSULATE,
Matamoros, July 14, 1882.

TABLE A.—*Imports from the United States into Matamoros for the half year ending March 31, 1882,*

No.	Articles.	Quantity.	Value.
8	Horned cattle	5	$48
9	Horses	295	3,968
10	Mules	2	30
11	Sheep	6,499	7,394
15	Beer in bottles, dozens	6,615	13,102
19	Blacking		750
22	Books		571
23	Brass, manufactures of		98
25	Bread and breadstuffs, pounds	32,782	3,381
32	Wheat flour, barrels	2,091	18,679
34	Maizena		3,753
36	Brushes		6
37	Candles, pounds	18,136	2,781
38	Carriages		2,663
40	Clocks		969
48	Cordage, pounds	254	10
51	Cottons, colored, square yards	1,491,136	106,749
52	Cottons, plain, do	532,087	43,946
53	Cotton, manufactures of		31,649
54	Chemicals		19,698
56	Earthenware		2,069
57	Fancy articles		11,168
60	Fruits		2,083
61	Preserved fruits		2,682
65	Glassware		11,531
75	Hats, of wool, &c., dozens	71	766
80	Hemp, manufactures of		1,902
81	Hides and skins		177
92	Castings		17,618
98	Machinery		13,721
99	Nails, pounds	16,810	1,436
100	Iron, manufactures of		12,565
102	Cutlery		837
103	Edged tools		2,758
105	Fire-arms		9,839
106a	Jewelry		60
108	Lamps		38
109	Lead, manufactures of		315
110	Fine leather		300
112	Boots and shoes, pairs	17,922	23,062
113	Saddlery		984
119	Stone, manufactures of		651
120	Matches		400
121	Mathematical instruments		350
123	Pianos		1,735
130	Illuminating oil, gallons	90,050	21,789
142	Cartridges		4,216
143	Gunpowder, pounds	2,451	1,148
146	Paints, &c.		1,116
147	Paintings, &c.		300
148	Paper		6,334
149	Perfumery		1,016
151	Printing presses, type, &c.		688
152a	Hams, pounds	8,660	1,484
154	Butter, do	12,783	3,402
155	Cheese, do	4,583	819
161	Cured fish		3,283
162	Lard, pounds	154,511	19,261
168	Potatoes, bushels	634	1,073
170	Preserved vegetables		240
171	Quicksilver, pounds	15,000	6,000
180	Sewing-machines		12,430
182	Soap, other, pounds	140,330	7,242
184	Distilled spirits, grain, gallons	22,161	11,081
188	Starch, pounds	56,542	3,229
191	Refined sugar, do	210,282	21,436
193	Candy, do	790	180
195	Tin, manufactures of		970
196	Tobacco, leaf, pounds	42,873	40,997
199	Tobacco, manufactures of		24
200	Trunks		2,488
208	Wearing apparel		534
211	Boards, &c., 1,000 feet	326	13,406
213	Shingles, 1,000	230	1,458
223	Furniture		7,912
224	Woodenware		112
225	Wood, manufactures of		5,796
228	Wool, manufactures of		8,297
	Total		589,053

TABLE B.—*Imports of European goods for the half year ending March 31, 1882, consular district of Matamoros.*

No.	Articles.	Quantity.	Value.
11	Cocoa ..... pounds..	2,738	*$520
13	Coffee ..... do ...	382,031	*48,528
14	Tea ..... do	2,379	*1,110
47	Other articles	.....	*319
9	Chemicals, n. e. s	.....	916
40	Beer, ale, &c ..... gallons..	273	218
50	Books	.....	2,283
51	Brass, manufactures of	.....	657
57	Rice ..... pounds..	139,203	3,175
65	Buttons	.....	2,425
66	Chemicals	.....	6,526
68	Clothing, ready-made	.....	8,337
69	Articles of wear	.....	19,449
74	Copper, manufactures of	.....	1,012
76	Cottons, plain	.....	27,553
77	Cottons, printed	.....	38,329
78	Cotton hosiery	.....	3,219
79	Cotton jeans, &c	.....	17,790
80	Cotton, other manufactures of	.....	46,950
81	Earthenware	.....	12,447
82	Fancy goods	.....	7,959
85	Sardines	.....	6,254
88	Flax, yard goods	.....	14,068
89	Flax, other manufactures of	.....	8,927
90	Fruits	.....	6,015
91	Furs	.....	5,551
97	Glass, manufactures of	.....	3,082
106	Bar iron ..... pounds..	271,487	4,976
109	Railroad rails ..... do	228,500	3,292
110	Sheet-iron ..... do ...	1,548	36
113	Chains, &c. (iron) ..... do	1,988	91
114	Machinery	.....	32,206
115	Fire-arms	.....	344
116	Bar steel	.....	487
118	Cutlery	.....	1,700
119	Files, &c	.....	98
121	Other manufactures of iron and steel	.....	28,080
122	Jewelry	.....	4,000
128	Lead, manufactures of	.....	62
129	Leather, all kinds ..... pounds..	1,102	958
131	Other manufactures of leather	.....	6,554
132	Stone, manufactures of	.....	22
133	Metal, manufactures of	.....	4,025
134	Musical instruments	.....	974
137	Olive oil ..... gallons..	2,692	3,726
139	Vegetable oil ..... do	139	132
146	Paints	.....	62
148	Paper, writing	.....	11,479
150	Paper, other manufactures of	.....	8,261
151	Perfumery	.....	3,406
154	Provisions	.....	5,322
161	Silk, manufactures of	.....	15,240
166	Spices ..... pounds..	19,275	3,147
167	Straw, manufactures of	.....	42
174	Tin in plates ..... cwt..	568	2,777
177	Cigars ..... pounds..	2,104	3,776
180	Spirits in casks ..... gallons..	1,808	2,356
181	Spirits in bottles ..... dozen..	2,869	13,877
182	Wine in casks ..... gallons..	38,807	17,737
183	Wine in bottles ..... dozen..	6,375	19,891
184	Wood, manufactures of	.....	2,958
190	Wool cloth	.....	32,206
192	Wool shawls	.....	7,825
193	Wool blankets	.....	969
194	Wool carpets ..... square yards..	281	220
195	Wool dress goods ..... do ..	27,864	5,429
196	Wool hosiery	.....	66
197	Wool, other manufactures of	.....	2,112
200	All other dutiable articles	.....	780
	Total	.....	543,150

*Imported into United States free of duty, and imported here from the United States.

TABLE C.—*Comparative. Half year ending March* 31, 1882, *consular district of Matamoros.*

MOSTLY FROM UNITED STATES.

No.	Articles.	United States.	Europe.
1	Beer, ale, &c	$13,102	$218
2	Live animals	11,440	.....
3	Bread and breadstuffs	25,813	.....
4	Cartridges, arms, and powder	15,203	344
5	Coal oil	21,789	.....
6	Provisions	31,030	5,322
7	Sewing-machines	12,430	.....
8	Soap	7,242	.....
9	Starch	3,229	.....
10	Refined sugar	21,436	.....
11	Tobacco, leaf	40,997	.....
12	Castings, iron	17,618	.....
13	Nails	1,436	.....
14	Boots and shoes	23,662	.....
15	Lard	19,261	.....
16	Boards	13,406	.....
17	Furniture	7,912	.....
	Totals	287,006	5,884

MOSTLY FROM EUROPE.

1	Coffee	.....	$48,528
2	Articles of wear	$534	19,499
3	Cotton hosiery	.....	3,219
4	Cotton jeans	.....	17,790
5	Earthenware	2,069	12,447
6	Flax, yard goods	.....	22,795
7	Bar iron	.....	4,976
8	Jewelry	60	4,000
9	Silk, manufactures of	.....	15,240
10	Wine	.....	37,628
11	Wool cloth	.....	32,206
12	Wool shawls	.....	7,825
13	Wool dress goods	.....	5,429
	Totals	2,663	231,582

FROM BOTH.

1	Drugs and chemicals	$19,698	$7,442
2	Cotton, plain	43,946	27,553
3	Cotton, colored (printed)	106,749	38,329
4	Cotton, other	31,649	46,950
5	Fancy articles	11,168	7,959
6	Paper, manufactures of	6,334	19,720
7	Glass and glassware	11,531	3,082
8	Spirits, distilled, grain and other	11,081	16,233
9	Machinery	13,721	32,206
	Totals	255,877	199,474

TABLE D.—*Exports to the United States for the half year ending March* 31, 1882, *consular district of Matamoros.*

No.	Articles.	Quantity.	Value.
22	Silver bullion	.....	$5,840
23	Silver coin	.....	92,073
	Total coin and bullion	.....	97,913
2	United States products brought back	.....	83
9	Chemicals, n. e. s	.....	103
28	Hair	pounds.. 72,004	14,634
29	Hides	.....	57,542
29a	Skins	.....	108,768
30	Personal effects	.....	1,000

TABLE D.—*Exports to the United States, &c.*—Continued.

No.	Articles.	Quantity.	Value.
38	Rags.....pounds..	60,900	$593
47	Istle.....cwt..	8,744	63,746
47a	Bones.....	.....	809
	Total.....	.....	247,278
	Add coin and bullion.....	.....	97,913
	Total free of duty in the United States.....	.....	345,191
48	Live animals.....head..	15,815	102,219
51	Old brass.....	.....	9
55	Indian corn.....bushels..	1,256	761
55a	Books.....	.....	13
60	Flour.....pounds..	16	136
69	Articles of wear.....	.....	16
74	Old paper.....pounds..	484	22
80	Cotton manufactures.....	.....	19
81	Earthenware.....	.....	137
82	Fancy goods.....	.....	112
88	Flax, manufactures of.....	.....	21
97	Glass, manufactures of (bottles).....	.....	27
121	Iron and steel, manufactures of.....	.....	106
127	Lead, in pigs.....pounds..	124	5
129	Sole leather.....do	915	285
131	Leather, manufactures of.....	.....	52
137	Olive oil.....gallons..	67½	111
148	Writing paper.....	.....	2
154	Fruits, preserved.....	.....	9
161	Silk, manufactures of.....	.....	39
166	Spices (ground and unground pepper).....pounds..	434	94
168	Brown sugar.....do	3,351	232
176	Leaf tobacco.....do	7	3
180	Spirits, in casks.....gallons..	304½	394
181	Spirits, in bottles.....do	165½	486
182	Wine, in casks.....do	4,023	1,720
183	Wine, in bottles.....	.....	236
184	Wood, manufactures of.....	.....	84
189	Wool, raw.....pounds..	82,072	7,674
190	Wool cloth.....do	59	227
197	Wool, other manufactures of.....	.....	6
200	All other articles.....	.....	647
	Total dutiable.....	.....	115,904
	Add free of duty in United States.....	.....	345,191
	Total.....	.....	461,095

TABLE E.—*Imports from the United States for the three half years ending March* 31, 1882, *consular district of Matamoros.*

Articles.	Half-year ending March 31, 1881.	Half-year ending Sept. 30, 1881.	Half-year ending March 31, 1882.
Agricultural implements.....	$1,455	.....	.....
Animals, live.....	22,893	$18,539	$11,440
Ale and beer.....	6,904	15,389	13,102
Books.....	1,455	1,169	571
Bread and breadstuffs.....	54,386	40,652	25,813
Candles.....	4,363	4,433	2,781
Carriages.....	3,283	4,531	2,663
Cotton goods, colored.....	98,445	110,235	106,749
Cotton goods, plain and manufactures of.....	81,723	92,971	75,595
Drugs (chemicals).....	16,166	29,715	19,698
Earthenware.....	759	3,543	2,069
Fancy articles.....	9,564	13,273	11,168
Fruit, all kinds.....	3,986	5,349	4,765
Glassware.....	8,011	6,430	11,531
Hats, of wool, &c.....	3,361	1,267	766
Hemp, manufactures of.....	1,596	1,531	1,902
Iron and steel, manufactures of.....	34,254	42,940	35,214
Machinery and locomotives.....	36,960	18,983	13,721
Fire-arms and ammunition.....	11,984	19,487	15,203
Books.....	16,099	22,800	23,662

TABLE E.—*Imports from the United States, &c.*—Continued.

Articles.	Half-year ending March 31, 1881.	Half-year ending Sept. 30, 1881.	Half-year ending March 31, 1882.
Leather, and manufactures of	$2,767	$1,135	$1,284
Mathematical instruments	.....	1,000	350
Pianos	2,167	1,692	1,735
Oils, illuminating	14,895	21,280	21,789
Paint and varnishes	3,349	2,973	1,116
Perfumery	989	361	1,016
Paper	7,586	9,029	6,334
Type	188	1,560	688
Ham, bacon, lard, beef, and fish	25,941	28,901	24,028
Butter, cheese, and condensed milk	3,707	1,882	4,221
Provisions, all other	1,977	1,464	180
Vegetables	2,321	1,030	1,313
Quicksilver	2,000	.....	6,000
Sewing-machines	10,399	24,134	12,430
Soap	14,390	14,289	7,242
Distilled spirits	10,376	9,634	11,081
Starch	5,899	6,034	3,229
Sugar	25,686	18,404	21,436
Tin manufactures	2,507	4,039	970
Tobacco, leaf	56,164	57,348	40,997
Trunks	2,376	3,159	2,488
Wearing apparel	1,281	400	534
Lumber, shingles, and manufactures of wood	17,663	39,975	28,684
Wool, manufactures of	5,748	1,604	8,297
Not elsewhere stated	8,498	2,913	3,798
Totals	646,521	707,477	589,653

TABLE F.—*Imports from Europe for the three half years ending March* 31, 1882; *consular district of Matamoros.*

Articles.	Half year ending March 31, 1881.	Half year ending Sept. 30, 1881.	Half year ending March 31, 1882.
Cocoa	$933	$2,358	$520
Coffee	47,113	66,355	48,528
Tea	88	466	1,110
Quicksilver	.....	10,041	.....
Books	2,006	1,944	2,283
Brass, manufactures of	1,317	2,500	657
Chemicals, drugs	8,194	11,129	7,442
Rice	5,004	4,962	3,175
Buttons	2,379	797	2,425
Articles of wear	21,471	24,412	19,499
Clothing, ready-made	.....	.....	8,337
Copper, manufactures of	2,034	641	1,012
Cottons, plain	58,626	84,547	27,553
Cottons, printed	55,178	156,416	38,329
Cottons, hosiery	6,143	3,930	3,219
Cottons, jeans, &c.	19,324	21,909	17,790
Cottons, manufactures of	42,373	54,885	46,950
Earthenware	12,244	15,236	12,447
Fancy goods	7,877	7,185	7,959
Sardines	821	5,513	6,254
Flax, manufactures of	31,469	40,716	22,795
Fruits	4,434	4,676	6,015
Furs	3,982	4,069	5,551
Glass, manufactures of	3,208	2,489	3,082
Bar, hoop, and sheet iron, and chains	14,419	9,762	5,103
Machinery	1,197	4,950	32,206
Manufactures of iron and steel	25,254	24,235	32,001
Jewelry	6,134	5,631	4,000
Manufactures of leather	7,266	5,693	7,512
Manufactures of metal	3,151	1,160	4,025
Musical instruments	1,768	515	974
Olive oil	1,853	4,996	3,726
Paper and manufactures of	9,676	8,218	19,720
Perfumery	2,385	450	3,406

TABLE F.—*Imports from Europe, &c.*—Continued.

Articles.	Half-year ending March 31, 1881.	Half-year ending Sept. 30, 1881.	Half-year ending March 31, 1882.
Provisions	$1,854	$2,349	$5,322
Silks, manufactures of	15,239	16,843	15,240
Spices	2,572	1,844	3,147
Tin in plates	2,187	2,474	2,777
Cigars	3,661	1,161	3,776
Spirits in casks and bottles	12,044	16,765	16,253
Wine in casks and bottles	16,396	23,354	37,628
Wood, manufactures of	3,093	1,859	2,958
Wool: Cloth	32,088	33,463	32,206
Shawls	11,103	11,252	7,825
blankets	2,919	611	969
Carpets	171	30	220
Dress goods	9,866	10,615	5,429
Hosiery	1,735	114	66
Other manufactures of	3,097	3,554	2,112
Not elsewhere stated	4,103	2,809	1,637
Total from Europe	531,489	721,883	543,150
Total from the United States	646,521	707,477	589,653

TRADE OF BELGIUM WITH THE UNITED STATES.

REPORT BY CONSUL TANNER, OF LIEGE.

I have the honor to submit herewith the following table, showing the commercial movement between the United States and Belgium, and a comparison of the same between the years 1881 and 1862:

IMPORTS.

Articles.		1881.	1862
Arms	francs	220,000	.....
Cattle	head	565	.....
Lumber	cubic meters	76,438	1,400
Do	do	310,380	1,550
Coffee	kilograms	1,800,000	1,550,000
Horses	head	96	.....
Grain of all kinds	kilograms	448,466,000	31,965,000
Grasses	do	11,500,000	854,000
Oils	do	774,000	1,316
Do	do	28,000	.....
Hides	do	666,000	308,000
Other oils	do	556,000	.....
Refined kerosene	do	138,000	.....
Other importations:			
Other refined oils	do	17,000,000	.....
Leaf tobacco	do	4,000,000	920,000
Manufactured tobacco	do	6,500	.....
Salt meats	do	18,800,000	2,000,000

EXPORTS.

Steel	kilograms	921,000	.....
Worked steel	do	3,160,000	.....
Fire-arms	francs	1,222,000	15,000,000
Cloth	kilograms	2,400,000	.....
Old iron	do	23,000,000	.....
Wire	do	1,646,000	10,000
Rails	do	10,320,000	26,000
Iron in bars	do	634,000	171,000
Nails	do	18,800	36,000
Worked iron	do	965,000	.....
Clothing	francs	73,000	.....
Machines	kilograms	345,000	.....
Raw hides	do	2,270,000	186,000
Vessel stores	do	547,000	.....

EXPORTS—Continued.

Articles.		1881.	1862.
Lard	kilograms	400,000	8,500,000
Books	do	300	.....
Sugar	do	103,000	.....
Woolen yarns	do	71,000	63,000
Do	francs	122,600	.....
Lace	do	6,000	.....
Glassware	do	963,600	61,000
Glass: Window	kilograms	3,600,000	3,084,000
Common	do	141,000	25,000
Miscellaneous	do	281,000	273,000
Zinc	do	1,540,000	1,900,000

The imports of wheat into Belgium from the different countries for the year 1881 were as follows, in kilograms:

United States	400,000,000
Russia	76,000,000
Prussia	17,000,000
Holland	29,000,000
England	20,000,000
France	2,000,000
Turkey	10,000,000
Roumania	12,000,000
Egypt	10,000,000
India (English)	66,000,000
English American possessions	4,000,000

The importation of wheat from the United States was 47,000,000 kilograms less in 1881 than in 1880. This was in consequence of the unusually favorable season and of a large crop yield.

I am enabled to furnish these tables through the courtesy of the Chevalier F. Flechet, a member of the chambers of commerce and agriculture, to whom I make my acknowledgments.

GEO. C. TANNER,
Consul.

UNITED STATES CONSULATE,
Liege, July 1, 1882.

TRADE OF NAPLES WITH THE UNITED STATES.

REPORT TRANSMITTED BY VICE-CONSUL BARFF.

Since the last "commercial report" sent from this consulate by the late consul to Edwin H. Smith the condition of trade with the United States continues for the most part unchanged. Since the month of April, 1881, up to to-day not one American merchant vessel has anchored in this port. Considering the steady increase of trade between Naples and its surrounding ports with the United States, I cannot comprehend why this is. The English, French, and Italian steamship lines are doing a most prosperous business, and the proof of this is that from year to year they are steadily increasing the number of their steamers. Their rates of freight are high, and to me this is another good proof of the florid condition of business.

Consul Smith, in his report of September, 1881, called the attention of exporters and manufacturers to the advantage that would be derived to our trade by the establishing of a few depositories of American productions and manufactures in this city. Should this not seem feasible, exporters might appoint agents chosen by them from among the best local houses through whom they could introduce and make known the

many different, useful, and ingenious articles of American manufacture which are so generally exported to Europe. It is advisable for American exporters to put down their prices to the lowest figure and take for their motto, "large sales and small profits."

EMIGRATION.

Emigration from the Neapolitan provinces is steadily on the increase. These emigrants are generally from the country, the provinces of Calabria and Basilicata giving by far the greater number. One of the principal causes of this increase of emigration is that wages are so low here that it is almost an impossibility for a man to earn enough to support a family. The working hours on a farm are as follows: from 4 a. m. to 12 m., then two hours' rest, from 2 p. m. to 8 p. m., in all twelve hours, and the pay a good farm hand receives is 1.50 lire (about 30 cents). The peasantry here are perfectly well informed as to the comparatively high wages paid in the United States to the tillers of the soil, and it is easy to understand how a poor but industrious man with no prospects of bettering his condition as long as he remains here decides on emigrating to a land where, if he does not amass a fortune, he has at least the probability of providing a comfortable home for his family.

COTTON-SEED OIL.

The importation of this article has greatly diminished during the last year, owing to the heavy duty which has been imposed on it by the Italian Government.

OLIVE OIL.

The olive-oil crop of 1881 was almost a total failure. It is a biennial crop. As that of 1880 having been unusually abundant no crop of any consequence was contemplated. In the district of Bari and some other districts producing fine eating oils, the olives are plucked from the trees in October and a small fraction of crop was secured in 1881; but at Gallipoli, Gioja, and other districts producing common oils, the olives of 1880 were allowed to remain on the trees until they dropped in the spring of 1881, and consequently the trees were too much exhausted to produce another crop the same year.

AGRICULTURE.

According to the statistics lately published by the Italian minister of agriculture, the following are the approximate figures of the harvest for the year 1881. The crops were much smaller than those of 1880, as will be seen from the following tables:

RICE.

Provinces.	Year 1880.	Year 1881.
	*Hectoliters.**	*Hectoliters.*
Piedmont	3,457,220	2,557,059
Lombardy	4,476,604	3,940,170
Venice	1,133,318	1,139,192
Emilia	861,764	763,233
Tuscany	16,219	12,233
Meridional (Adriatic)	2,744	1,372
Meridional (Mediterranean)	1,036	1,521
Sicily	13,821	10,708
Total hectoliters	9,962,726	8,425,488

* Hectoliter equals 2 bushels and 2.35 pecks.

It will be seen from the above that the rice crop of 1881 was inferior in quantity to that of the preceding year by 1,537,238 hectoliters. The area sown in rice was 222,090 hectares.* The quality of the rice was excellent in 65, in 422 good, in 234 middling, and in 18 very inferior.

RYE AND BARLEY.

Provinces.	1880.	1881.
	Hectoliters.	*Hectoliters.*
Piedmont	600, 449	459, 781
Lombardy	537, 227	524, 085
Venice	358, 534	349, 234
Genoa	52, 123	44, 644
Emilia	146, 244	122, 833
Marche and Umbria	198, 815	140, 082
Tuscany	140, 987	104, 180
Lazio	14, 580	8, 266
Meridional (Adriatic)	1, 460, 503	945, 100
Meridional (Mediterranean)	1, 139, 367	623, 081
Sicily	1, 839, 181	1, 045, 214
Sardinia	284, 157	246, 053
Total hectoliters	6, 772, 167	4, 612, 557

It will be seen from the above that there was a decrease in the crop of 1881 of 2,159,610 hectoliters against that of 1880. The area covered by these crops was 477,666 hectares. The quality was good in general.

OATS.

Provinces.	1880.	1881.
	Hectoliters.	*Hectoliters.*
Piedmont	210, 300	156, 594
Lombardy	336, 306	547, 003
Venice	474, 432	459, 001
Genoa	11, 421	10, 710
Emilia	239, 471	222, 277
Marche and Umbria	213, 695	175, 442
Tuscany	689, 531	544, 530
Lazio	218, 960	132, 480
Meridional (Adriatic)	2, 195, 872	1, 373, 911
Meridional (Mediterranean)	2, 283, 112	1, 422, 620
Sicily	69, 539	40, 174
Total hectoliters	6, 942, 647	5, 094, 742

In the crop of 1881 there was a decrease of 1,847,905 hectoliters when compared with that of 1880. The area sown in oats was 379,991 hectares. The total of the wheat crop for the year 1880 was 60,268,785 hectoliters against 36,510,532 hectoliters in 1881. The decrease in the crop of 1881 was 23,778,253 hectoliters. The area cultivated in wheat was 5,736,735 hectares. The quality of the wheat was good.

The crop of 1882 gives promise of being very abundant and of a very fine quality.

The silk crop for 1881 is only given in total and not by districts. The total amount was 39,847,664 kilograms. There was a decrease, when compared with that of 1880 1,836,418 kilograms. The average quality was good.

I think it right to add that this report has been made out by Mr. K. O. N. Meekersham, clerk to this consulate.

P. G. BARFF,
Vice-consul.

UNITED STATES CONSULATE,
Naples, July 11, 1882.

* Hectare equals 2,471 acres.

EMIGRATION FROM SWITZERLAND TO THE UNITED STATES.

REPORT BY CONSUL MASON OF BASLE.

On any Wednesday or Thursday afternoon—particularly during the spring or autumn months—there may be seen at the Central Railway station in Basle a throng of people, mostly of the industrial classes, mechanics, factory operatives, farmers, shepherds, and foresters from the rural cantons, and bright-faced young men from city counting rooms or the schools, with their sisters, mothers, wives, and children, of all ages, dressed in their best clothing and prepared for a long journey. Some are chattering volubly with friends, many are singing, while others are thoughtfully silent. These are the emigrants for the United States and the relatives and friends who have come to wish them God speed on their long journey to their new homes.

Basle is a principal point of assembly for emigrants, and the departures from this city include perhaps half of all that leave Switzerland for the United States. They start in companies or train loads of from three hundred to four and even six hundred persons, and not unfrequently they are joined at Havre or Antwerp by squads of one or two hundred more Switzers, who have come from Berne or the southern cantons. They speak mostly the German-Swiss dialects, and are therefore rated among the arrivals in America as Germans, but of the throng that lands each week at Castle Garden several hundreds are contributed by Switzerland. As already said, they are of all callings, but a large majority are farmers, the flower of the agricultural population of Argovie, the Bernese Oberland, and Eastern Switzerland. One company of sixty has recently left a village in Unterwalden to cross not only the Atlantic, but America as well, and found new homes in Oregon, where already they have friends and relatives fully established in grape culture and the manufacture of Swiss cheese. Another association sent out in May a competent farmer to seek out a tract of 25,000 or 30,000 acres of land in Texas or some other Southern State adapted to their purposes, and, this being done, the entire company of a hundred and twenty families will follow in September.

A few moments' conversation with the sturdy, intelligent emigrants who leave here each week shows clearly that their change of habitat is no blind leap into the dark; they have weighed all the chances, informed themselves thoroughly, and know where they are going and what they expect to do when there. Three out of every five have a brother, a father, or some trusted friend or neighbor who is already established in America, and has written back exact information which draws the remaining members of families resistlessly to the free life and larger opportunities of the New World.

As the Switzer is a patriotic, home-loving man, usually thrifty and content, it would require more than a superficial statement to fully explain this steady outflow of the best yeomanry of the Alpine republic. It is not because of untoward seasons, for although frosts have, in late years, made the wine crop meager and uncertain, the harvests of last season were good, and the preceding and succeeding winters exceptionally mild and genial. It is not from an oppressive government or a grinding military system that the Swiss emigrant flees, for this is "a government of the people, by the people, for the people," and the militia service of

the mountaineers and workingmen, admirable as it is in a military and economic sense, is hardly more than a summer holiday compared with the rigid martial duties under the French, German, and Austrian systems. But, whatever else is true, it is undeniable that Swiss agriculture is not prosperous, as prosperity has come to be understood in this day of grace.

A man with an ordinary farm of about 60 acres, stocked and paid for, can make a fair living, and not much more. If he has to buy his land from the fruit of it, he has an up-hill fight, in which a long, industrious, frugal life may be worn out, with no certain victory at the end. The overflowing plenty of America, the cheap meats and bread-stuffs grown upon prairies and Western valleys, with all advantages of machinery and a virgin soil, have reduced the value of the Swiss farmer's crops to the bare cost of production, and an unfavorable season leaves him in debt when the accounts of the year are settled. Anon there comes back to his native valley as a visitor, a relative, or neighbor, who emigrated to America some dozen years ago and has already achieved a substantial success. He went with a few francs in his pocket; he comes back the owner of his farm, his shop, or other establishment, to tell his neighbors how much more easily and surely the battle of life may be won in a country which builds railroads through leagues of farming land, whose cost can be raised in a single crop; and thus, made discontented with his lot in his native valley, where every rod of ground must be fertilized, nursed, and tilled like a garden to remain productive, the Swiss husbandman sells out his little farm for what he can get, and sets his brave sturdy face westward. Five of every six who start know precisely whither they are going. A few will stop in Virginia and Kentucky; some go to Ohio and Indiana, but a large majority of all are bound for the Northwest, Wisconsin, Iowa, Minnesota, and the wheat-belt that lies along the line of the Northern Pacific Railway. Of emigrants like these, the United States can never have too many. Their thrift and industry will make the waste places of the South and West blossom like the rose.

Occasionally there is seen among the weekly contingent of emigrants a party of silk weavers from Basle or Zürich, *en route*, with their families, to New Jersey or Connecticut, to lend their skilled industry to the development of American silk manufactures. Until this year, the rising tide of emigration to America has been uniformly regarded by the press and public men of Switzerland with complacent favor. A liberal and excellent law was enacted last year which protects the emigrant from the rapacity of agents, and secures for him fair treatment by railway and steamship companies; and a leading Federal representative from the Canton of Schaffhausen has in preparation a scheme to establish federal authority, a bureau of emigration the purpose of which will be to secure well-chosen lands in the United States and provide for the settlement of Swiss farmers thereon at the smallest possible cost for transportation and outfit.

But it has been noticeable this spring that the more thoughtful of the Swiss journals and economists begin to regard this steadily augmenting loss of capital and industrial producing power with serious apprehension. They note the greatly improved character and condition of the emigrants as compared with those of two or three years ago. Each year the drain affects a higher, more independent, and valuable class. The average amount of money taken away by each out-going family increases year by year. The poor and unthrifty, the laborers who live by daily wages, could well be spared; but there is a growing feeling that the

loss of so many intelligent, forehanded agriculturists and skilled factory operatives may entail serious consequences.

The foreign emigration from Switzerland, which amounted to 4,288 in 1879 and 7,255 in 1880, rose to 10,395 in 1881, and has already, during the first six months of 1882, reached 8,000, with a prospect of exceeding 12,000 before the close of the year. When and where will this rapidly rising exodus end? What are its underlying causes, and is there any legislative remedy within reach of the Cantonal or Federal Governments? This opens the important questions: Why is Swiss farming unprofitable? How far is this fact due to the competition of American meats and cereals? How long will Swiss manufacturers—the watchmakers, the aniline chemists, and silk weavers—be able to withstand the competition of American industry, and maintain their present large balance of export to the United States? Is there, after all, any permanent protection for European manufactures and agriculture against the enormous resources, the industry, and the enterprise of the American Republic?

FRANK H. MASON,
Consul.

UNITED STATES CONSULATE,
Basle, July 24, 1882.

AMERICAN TRADE COMPETITION.

REPORT BY CONSUL MASON, OF BASLE.

The extent to which the foregoing questions have occupied the attention of not only Swiss economists, but of the governing classes throughout Europe during the past two years, can hardly be realized without constant observation of the leading newspapers, pamphlets, and official reports in these countries, and the protective measures which have been proposed or adopted during the same period, especially in the forms of tariff laws and treaties of commerce.

Political economists and official statisticians have lectured before chambers of commerce upon the growing dangers of American competition, pamphlets bristling with statistics have been published by order of imperial governments and laid before parliamentary assemblies to warn them of the extent of the peril and inspire them to devise protective remedies. Hasty, ill-considered measures like the English laws regulating the import of cattle, the French and Austrian decrees against American pork, and the German tariff decisions, classifying American hams as cotton goods, and canned meats as hardware, have been adopted to break the overwhelming force of transatlantic competition and stop the ominous westward flow of gold.

The severe American winter of 1880–'81 with the succeeding summer of drought and shortened harvests, and the attendant advance in the prices of cattle and meats, coming simultaneously with a more than usually fruitful year in Europe, have diminished food exports from the United States in 1882 until the trade balance has, for the moment, turned in favor of the Old World; but all intelligent thinkers see that this is only a temporary obstruction in the natural current of supply, and that the promising American harvests of this year, with the cold, wet European summer and the war clouds on the southeastern horizon, will soon and inevitably turn the balance of traffic again in favor of the United States.

The question remains to be met: How are the manufactures and agriculture of Europe to be protected against the onward march of American competition? Not only in respect to food products and raw materials, but in many manufactured articles of dress and luxury, the equality and even superiority of the American article is fully recognized. The time is past when a thing can be sneered at as crude and coarse merely by reason of its western origin. Says Mr. Emil de Lavalaye, the distinguished French economist:

> America tends more and more to dispense with our goods, because, with better educated and more intelligent workmen, and a more general use of machinery, she manufactures as well and sometimes better than we.
>
> I confess that I cannot see American watches figuring in the shop windows at lower prices than the Geneva ones without becoming uneasy. When I receive a book from the United States, I cannot help admiring the print, the paper, and even the string around it. The growth of America and the advance of her industry are stupefying.

It is but a few months since Mr. Worth, the noted Parisian lady's tailor, pronounced American dress silks equal to the best that Lyons can produce, and the English and Parisian tailors who announce in their cards and advertisements "an American fit guaranteed," pay a similar tribute to the superior style and finish of gentlemen's clothing when made by the best workmen in the United States. Just as European manufacturers of nearly all classes understand that their *best goods* are wanted in the United States, so it has come to be recognized that our home manufacturers, wherever they have become fully established, have set new and higher standards of quality. A protective tariff and higher wages to labor still keep certain American products out of competition in some foreign markets, in respect to price, but the line of attack is lengthening and advancing day by day. The American manufacturers, as well as the Western farmer and stock-raiser, are meeting their European competitors in a constantly widening field and forcing them within strictly defensive lines.

How to meet this steady aggressive march of Western competition is, therefore, as already stated, the present great economic problem of European statesmanship. Of the numerous volumes, pamphlets, reports, and speeches which have been delivered to continental parliaments, cabinets, and chambers of commerce during the past year, perhaps the ablest, fairest, and most comprehensive is that of Dr. Alexander Pecz, member of the Imperial Council of Austria and an economic writer and statistician of wide reputation. It may fairly be doubted whether the vast resources of the United States and the intelligent energy and enterprise of their people have ever been elsewhere, in a treatise of similar compass, so broadly and convincingly set forth. Certainly not in any European language will there be found so striking a statement of the part which the American Republic is now playing in the progress and economy of human civilization.

This bold essay has been read, reviewed, and discussed in every corner of Europe. Newspapers have condensed its statistics and quoted its conclusions, and a lecture delivered recently before the commercial societies of Basle was found to have had the pamphlet of Dr. Pecz for its groundwork and inspiration. Reviewing in succession the finances of the American war period, the crisis of 1873, and its effects upon national industry, the immense productive capacity of our soil and mines, the development of cheap transportation and other vital conditions which affect the production and export of meats and breadstuffs; the successive yearly products of coal, iron, petroleum, and precious metals, and the political influences of intelligent, prosperous, and en-

franchised workingmen upon our industrial legislation, he contrasts the spectacle presented by the most prosperous nation in the world, having a small and inexpensive army and navy, and giving monthly its surplus millions to the extinction of its public debt, with the overburdened governments of Europe, staggering under costly military establishments and navies which they are as unable to abandon as they are to discover new resources in their tired fields and fully-developed mines, or make their annual revenues overbalance their steadily increasing expenditures. He then considers separately and in detail the past and probable effects of American competition upon the prosperity of Great Britain, France, Germany, Austro-Hungary, and the East respectively, and finally comes to the proposition for which everything preceding has been preparatory, viz: What can Europe do in self-defense? How best protect her farmers from the cheap breadstuffs, the meats, and abounding fruits of the United States, and still give their working people cheap and wholesome food? How cut off the portentous influx of American manufactures and still avoid losing the United States as a market for their own cheaply made and redundant wares, without which outlet a large part of the manufacturing industries of Europe could not exist a year?

It is just here, when the eminent Austrian economist comes to consider ways and means of defense, that he becomes vague and inconclusive. His first thought is of protective tariffs, a combination of continental Europe against England and the United States. But Germany has tried the protective tariff system quite thoroughly, and the result is not assuring. An inter-European treaty of commerce between nations so sensitively related to each other as France, Germany, Italy, Austria, Russia, and Switzerland would involve difficulties which no diplomacy could master. Frankly admitting that the British restrictions against the import of American cattle through a pretended dread of rinderpest—like the French and Austrian decrees against American pork, based upon the thinly disguised assumption that they were trichinous—were, all alike, crude and transparent devices to abolish meat imports for economic rather than sanitary reasons, the learned doctor concludes that there is no permanent relief to be found in prohibitory decrees or protective tariffs, and suggests that after all the only practical resource is for Austria to imitate, as far as possible, the methods and qualities which have made the people of the United States prosperous and powerful.

Quiet and romanticism [he says] vanish from the world. With a drop of American blood must the old nations of this continent inoculate themselves. Cherished dreams, the prejudices of a thousand years ago, are no longer tenable. * * * In the sixteenth century the competition of America revived European gold and silver mining, changed the currents of the world's commerce, caused a revolution in values by a sudden and enormous increase of the precious metals, transformed the social conditions of European nations and opened the way to that fearful struggle of the masses, during the 17th century—the thirty years' war. May American competition in the nineteenth century have a happier influence. At all events, it is the greatest economic fact of the present time. Whether it shall prove a blessing or a calamity will depend upon the measure of judgment and energy which the governments and people of Europe bring to bear against it.

In the Italian Parliament there has taken place a long and exciting debate upon the same general topic, without reaching any definite result. The Italian statesmen recognize as fully as the imperial Austrian economist the growing strength of American competition, but they are equally at a loss to devise means of protection.

It would be strange if recognition like this, coming from two of the oldest monarchies in Europe, should not stimulate the American com-

petitors whom it eulogizes to renewed and more confident exertions. Assuming what is fully conceded, that the United States have gained and will retain practical control of the food-markets of Europe, how shall our exporters of other classes of American products improve their relations and increase their traffic with the Old World? The requirements and conditions of import trade differ widely in various European countries. With reference to Switzerland, the following suggestions are offered.

FRANK H. MASON,
Consul.

UNITED STATES CONSULATE,
Basle, July 24, 1882.

SILK CONSIGNMENTS TO THE UNITED STATES.

REPORT BY CONSUL PEIXOTTO, OF LYONS.

There has been of late, and continues to be at present, very great and general indisposition on the part of silk manufacturers to make consignments to the United States.

Complaint is made not only of the difficulties and annoyances suffered at the custom-house, but of the poor prices realized, and, as it is claimed, of losses sustained when the goods are finally put upon the market.

Another reason assigned is the poor business of the past two months in New York, the uncertainty as to crops, and the difficulty of determining what goods will be in demand. The raw-silk market, in spite of the ascertained deficiency in the Italian crop, continues without activity, though holders maintain firm figures for desirable qualities, and no break is observed except the China silk.

On the other hand, the result of the silk harvest in France has inspired fresh courage to the filature or reeling industry, which has suffered so much for several years.

The "pebrine" which for twenty years had sterilized the French silk crop, the syndicate of the *marchands de soie* (silk merchants) of Lyons, declare has completely disappeared.

Last and this year's experience has proved that the worms are now as healthy as at any time in the past, and this year the mulberry leaves were inadequate to supply the essential food.

This is owing to the fact that a few years ago when the raising of silk from the disease of the worm, and from the unremunerative price of the silk, was so disastrous, thousands of mulberry trees were uprooted, and the crops, notably the vine, planted in their place.

The phylloxera in its pestilential turn has rendered the viticulture industry even more deplorable than the mulberry, and it would not be surprising to see the latter once more taking root in French soil.

Three years suffice to give the mulberry tree its growth and productions, and there is every probability of this now taking place. I think I am therefore justified in calling as a "revival," sericulture in France.

There are few industries, viewed in all its ramifications, that present so much attraction and have yielded so prosperously to those engaged in it as that of silk.

Youth is scarcely ever too young, old age too feeble, but what work, and pleasant work, may be found in this branch of agriculture and commerce.

It is peculiarly a domestic industry, and possesses, therefore, another attraction, as it keeps the family together longer than almost any other. It is, besides, profitable, as the outlay is small and the income considerable.

With their proverbial habit of "small economies," there is little doubt but what, with the renewed demand for silk fabrics, the French sericulture is about to enter on a new era of prosperity.

This fact is rendered more certain by recent discoveries and inventions in the reeling of silk, and I may add, in the making of a superior article than has ever before been produced from the cocoon.

I have alluded to the principal invention in this connection in previous dispatches as having been made by an American, and I shall, in a later report, have occasion to speak of this remarkable improvement, which is likely to revolutionize silk industry throughout the world.

I am, sir, yours, &c.,

BEN. T. PEIXOTTO,
United States Consul.

UNITED STATES CONSULATE,
Lyons, June 29, 1882.

FAILURE OF CROPS IN EUROPE.

REPORT BY CONSUL TANNER, OF LIEGE, BELGIUM.

The protracted downpour of rain has played sad havoc with everything in which the farmers placed their fondest hopes on this side of the ocean. I am told by the best-informed agriculturists that in Belgium the most they can hope from the wheat crop is half a yield. The gardens suffer equally with everything else. Irish potatoes are taken out of a soil so damp that they commence to rot within a week after they are gathered. Large importations from some quarter must necessarily follow, and American producers are strongly urged to devise means for placing their Irish potatoes on the markets of Brussels and Antwerp this winter where they will find ready sales.

This has been a most disastrous year for the English hop crop. The enormous value of this crop is but little known, even in England. The acreage in hops in the kingdom is close upon 70,000, and the difference between a good crop, say of 10 cwt. to the acre, and a blighted crop of only 2 cwt. per acre, is represented by millions. A good large crop would realize an average of $25 per cwt., while a crop of only 2 cwt. per acre, of probably as good a quality as the other in the production of young, fresh vines, would probably fetch $50 per cwt. The importations from the United States, however, so completely rule prices that figures cannot be relied upon with certainty until the quantities of said importations be ascertained. An approximate idea can be formed as follows: 10 cwt. per acre, at $25 per cwt., is $250 per acre, which on 70,000 acres would amount to $17,500,000. Two cwt. per acre, at $50 per cwt., would amount on 70,000 acres to $7,000,000, and would show a difference of $10,500,000. This may be taken as a fair approximation of the hop crop, exclusive of some incidentals, to be treated of farther on.

This considerable loss is a heavy blow to the great industry, nor is it the only one the English farmer will be called upon to face this year. A regular pest of flies and lice prevails and wages war on the hop plant; this, in addition to the bad weather, has proved destructive to the hopes of planters.

The cost of picking a large crop, including the drying, pole pulling, and other incidentals, would be at the rate of one shilling per seven bushels, or 20*s.* per cwt., say $50 per acre; this on 70,000 acres would amount to $3,500,000. The cost is greater per cwt. for picking a small crop than for a large one from the difficulty of finding the hops when thinly scattered on the vines, and 30*s.* per cwt. would be about the price to be paid; this on 70,000 acres, at 2 cwt. to the acre, would be about $10,500, so that in four weeks' work the laborer would sustain a loss of $2,450,000.

In a season such as prevails this present year, the above figures show that the total approximate loss to the hop industry this year will amount to about $14,000,000. In this estimate there has not been taken into account the further expenses and losses incidental to hop cultivation, such as washing the plant with a decoction of soft soap and tobacco juice, and outlay for engines to spray this decoction on the plant with sufficient force to kill the parasites; these items still further increase the loss, and that to a by no means insignificant degree.

The effects of the foregoing are vast and far reaching. The price of land is on the constant downward tendency, and is now 40 per cent. lower than its value of three years ago. Farms that had been handed down in families from generation to generation now have new tenants, and there is little inclination apparently to run the risk of taking farms at any price.

GEO. C. TANNER,
Consul.

UNITED STATES CONSULATE,
Liege, Belgium, July 20, 1882.

NAVIGATION AND COMMERCE OF VANCOUVER.

REPORT BY CONSUL FRANCIS, OF VICTORIA.

There were seventy-seven arrivals and seventy-five departures of American vessels during the past three months in this port. These were mostly steamers making tri-weekly, tri-monthly, and monthly trips from and to American ports; their aggregate tonnage being 69,742. The arrivals brought importations of the reported value of $688,929, nearly double any preceding quarter, consisting largely of railroad materials for the Canadian Pacific, and mainly from the United States. In the arrivals were several large sailing vessels from foreign ports in ballast, seeking business.

Six American ships from China brought over 3,000 Chinese passengers, and in the mean time 5,000 more arrived on foreign vessels, all under contract to labor for three years in the construction of the Canadian Pacific and Northern Pacific Railroads. The amount of rice accompanying these passengers is reported to be over 50,000 mats. As to the number of Chinamen now in the province, one of the newspapers of the city very recently stated there was one for every white man, and that two more shipments of 1,200 were daily expected. The number of laborers, white and Chinamen, now employed on the line of the railroad in the province is reported at 12,000, two-thirds of whom are Chinamen.

Experience has proven, since railroad construction commenced, that white laborers in sufficient numbers were not obtainable on the coast or in the States to prosecute the work according to agreement, and the con-

tractors were compelled to resort to the importation of Chinamen, and they are represented as coming fully up to their expectations, being found sober, industrious, orderly, and quiet. Among the people, however, there is a growing feeling of opposition manifested against this class of people, and in the canvass now progressing for members of the dominion and provincial parliaments candidates are pledging themselves to support any kind of legislation that will drive them out of the province.

The exports by the seventy-five departures of American vessels from this port to the United States, as invoiced, amounted to $186,731.57, and from other parts of the province in American and foreign vessels $159,718.09, making $346,449.66—leading articles being coal, of which there were thirty-two cargoes, 50,495 tons, valued at $169,627; gold dust and bullion, $89,649; fur seal, $58,643; and hides and skins, $16,199.32. The exports in American and foreign vessels to foreign ports, consisting of lumber, coal, wood, furs, oil, and fish, are estimated at $125,000.

No disasters to the shipping on the coast have been reported during the quarter.

Fur-sealing on the west coast of Vancouver's Island and Washington Territory closed about the first of July. There were twenty-six sail of vessels, ranging from 20 to 80 tons, engaged in the business. The catch of the entire fleet is estimated at about 21,000. On account of competition the portion (two out of every three) belonging to the Indian sealers were run up from $5 to $10 per skin, and the Indians are the only ones who will make money the past season. Prices in this market range from $5 to $10, according to quality and size of skin.

Salmon commenced running in Frazer River about the 1st of July, and in the rivers of the coast north of it some two or three weeks earlier. This fact has been observed for several successive years, and the conclusion is that the salmon on this part of the Pacific coast come down from the north. In the province are nineteen canneries, and on there being the usual run of salmon, it is estimated, will enable them to put up 150,000 cases of 50 pounds each. Vessels are being chartered on lower terms than last year to carry the entire season's put-up to foreign ports. Prices are the same as last year, $5 per case.

The failure of the company obtaining the charter to build the island railroad to deposit $250,000 resulted in the forfeiture of the charter and of the $10,000 deposited by the company. The effect has been depressing upon the city of Victoria and the island.

Intending settlers and business men pass on to Washington Territory, which is now making rapid progress in settlement and prosperity.

The crops of the province, on account of prolonged dry weather, are very unpromising, and the June flood of Frazer River has destroyed nearly all the growing produce of farms on its banks.

ALLEN FRANCIS,
Consul.

UNITED STATES CONSULATE,
Victoria, V. I., July 15, 1882.

THE MEXICAN ZONA LIBRE.

REPORT BY CONSUL SUTTON, OF MATAMOROS.

The present condition of the Zona may be briefly stated as allowing all foreign dutiable merchandise to be imported into Matamoros, Cam-

argo, Mier, Guerrero, and Nuevo Laredo, all in the State of Tamaulipas, free of all duties except one-half cent per pound and $1\frac{37}{100}$ of the regular Mexican import tariff.

The one half cent per pound does not apply to the so-called free-list. Goods once imported may be consumed in these towns free of further duties, or may, under certain safeguards, be transported to other towns inside the Zona and there consumed free of duties.

Goods to a small amount may be taken out to ranches inside the Zona for consumption.

The limits of the Zona are the narrow strip of the State of Tamaulipas lying along the right bank of the Rio Grande, from a few miles above Nuevo Laredo to the Gulf, and extending back from the river not to exceed about 25 miles, and not in any case beyond the limits of the State of Tamaulipas.

When goods are to be sent outside the Zona they must be manifested and the full duties paid thereon less those paid on importation.

Foreign goods sent to the United States or to Europe cause the same duty as to the interior of Mexico.

The cities of Matamoros, Reynosa, Camargo, Mier, Guerrero, and Nuevo Laredo, having a population of about 50,000, are all inside the Zona.

Under the head of Relations of the United States with Mexico, Mr. Representative Schleicher, from the Committee on Foreign Affairs, at the second session of the Forty-fifth Congress, submitted a report (House of Representatives, No. 701) which embraced among other topics a full discussion of the Mexican Zona Libre.

I quote portions of pages XIX to XXI of the above report, and after each quotation discuss the points considered as they appear to me at the present.

Further references will be made to the data on the same topic given in Appendix C of the same report.

Happily for all concerned, the differences which then obtained between the two countries have disappeared and an era of good feeling and commercial activity has taken its place.

The Zona Libre, however, is still in force, and it is this subject which I desire to discuss.

In doing this it must be borne in mind that times and conditions have so changed that many an argument that was sound and applicable when written years ago will not now apply.

In March, 1858, Ramon Guerra, governor *ad interim* of Tamaulipas, by virtue of an act of the legislature of that state, issued a decree authorizing the introduction of foreign goods into the city of Matamoros and the other towns on the Rio Bravo (Rio Grande), Reynosa, Camargo, Mier, Guerrero, and Monterey-Laredo (New Laredo), and their jurisdictions, free from all duties except municipal taxes.

This was the origin of the *Zona Libre*, or free belt, so called because it established a belt along the Grande the length of the State of Tamaulipas into which goods could be imported free of duty. The object expressed in the decree was to prevent the decay of the towns of the northern frontier of Mexico. The towns on the opposite side of the river in Texas were then flourishing and rapidly increasing in trade and population, and it was feared that all the local trade would move from the Mexican over to the Texan towns.

These are history and stand unchanged.

It was a revolutionary act a violation of the constitution of Mexico, hostile to the national government, whose revenues it annulled, and hostile to the ports of entry in Mexico, against which it established a ruinous competition.

This action was undoubtedly rather extra official, but as it was afterward legalized and has been retained by the general government the respon-

sibility must by this time have been fully diverted from the state to the nation.

But it gave the merchants of the towns on the Mexican side of the river such an advantage over the merchants on the American side that competition was impossible and trade became at once predominant on the Mexican side. One of the articles of the decree permitted all merchants from the American side of the river to move over with their entire stocks of goods without the payment of any duty thereon.

Allowing something for a certain extravagance in regard to reports about the Zona and other matters pertaining to Mexico, and this may be stated as nearly correct. It certainly did for a time help to throw the balance of trade from the American to the Mexican bank. There is no question that such was the intention of Governor Guerra and the merchants of Matamoros, who in 1851–'58 were urging such a step. From what I have been able to learn, however, the effects of the Zona had hardly become apparent when the late civil war in the United States became a patent factor. It must indeed have seemed providential for the Matamoros merchants that the Zona had just got into operation in time to play a part in the tremendous struggle of 1861–'65.

The tariff laws of Mexico may not be the worst, but they are one of the worst of the many evil things decended from the Spanish dominion.

Without the elasticity thus afforded by the Zona, the struggle between import laws and no import laws would have been severe at least for the laws.

Doubtless it would have ended in a rapid overturn of even a semblance of law, as the strain would have been too great. For with the Confederate and the Union forces engaged in the most desperate struggle of the world, the former soon found the Atlantic and the Gulf ports closed, except in a fugitive sort of a way, from the outer world. But away down their southern border was one outlet, so long as they could hold the Brazos de Santiago and Brownsville. When these were lost they could still cross the Rio Grande into the Zona, free of duties, make their way to Matamoros, and under the combined aid of the Zona and the so-called neutrality of a nation in civil disorder, and fighting in a desultory but still heroic way against the intervention of the French Emperor, make their way out via Bagdad to Liverpool and Nassau.

The two influences, of which, however, the war was many times greater than the Zona, worked like magic.

The little town of Matamoros, hardly more than a village, became at a bound one of the great ports of the world, with a surging, excited population of 40,000.

At the mouth of the river Bagdad grew from nothing to 12,000 inhabitants, with 80 vessels at a time lying off the dangerous roadstead. Provisions, supplies, munitions, bone and sinew for the Confederacy, came in, and the cotton, for the lack of which the weavers of Lancashire were suffering, went out in neutral vessels to pay for more.

All the world came to Matamoros in those days, and nearly every nation was represented in its commerce. Business ventures assumed gigantic proportions; fortunes were made and lost and made again; revolutions, sieges, battles, the intervention, came and went, and Matamoros and Bagdad, modern Sodoms and Gomorrahs, lived out their brief career. But the end came all too soon for them, and after the general break up of 1865 business settled down to more moderate proportions. In this period, however, so many houses had become established and had made connections in business ways that Matamoros still had a controlling power in the trade of the frontier.

Because of the high tariff on the American side and the free entry on the Mexican side the advantage in trade was greatly in favor of the latter.

This continued until about 1877, when, by reason of reduced tariffs in the United States by which many classes of goods could be imported free of duty and held for sale, and of the increased sale of many kinds of American manufactures, the merchants on the American side could compete with the Zona merchants in everything except wines, liquors, cigars, cloths, cassimeres, linens, rugs, silk, laces, and a few other articles.

The increase in the demand for various American manufactures has enabled merchants on the American side to compete still more with the Zona merchants. This has been aided by the low taxation, more stable government and protection received on the American side, and the exorbitant taxes, revolutions, and hazards of business on the Zona side.

To-day I consider, taking the total trade in all classes of goods, that merchants on the American side are more advantageously situated than merchants enjoying all the benefits of the Zona.

That this competition is possible and is a fact can be abundantly shown by the houses which have given up their Matamoros business and transferred the same to Brownsville, or who have, while still retaining their Matamoros house, made it only a secondary interest. This state of things now obtains and seems likely to continue to the detriment of the business interests of Matamoros.

Although provision was made for the payment of duties on merchandise passing out from the belt into Mexico and across the river into Texas, it is evident that an immense facility was opened for smuggling out of the belt over the long-unguarded lines through the wilderness. In Article 8 of the decree Governor Guerra declared that, to prevent this privilege from being converted into a shameful smuggling traffic, it should be considered the duty of every citizen voluntarily to become a sentinel, constantly on the watch to prevent smuggling. This appeal to the civic virtues of the people seems to have been the only precautionary measure taken to prevent the shameful smuggling traffic.

To this may be said that such is the vigilance at present of the customs guards that smuggling from Matamoros, whether of bonded goods back into Brownsville, or of any class of goods into the interior of Mexico, is extremely difficult. There is now and has been for some time bad blood between the smugglers and the guards, and bloody battles are of quite common occurrence. But the smuggling *from Matamoros* is not one-fifth as much as the smuggling from the American side across the river and into the interior.

In past years it was more possible to get out of this city by bribery or collusion of the guards, but the rigorous, even tyrannical, enforcement of the laws has greatly chan.ed all this.

The smuggling from Matamoros into the interior is comparatively small, and has grown smaller each year for four years.

Of course, in these statements, I cannot give facts and figures to prove them, but the above are what may be called notorious facts, evidenced by closing of some stores and diminished sales in most of those remaining.

The transfer of the trade from the American to the Mexican side of the river was largely accomplished, and would have been complete but for the fear of the chronic anarchy and revolution in Mexico. Smuggling became the rule of business. Both the Mexican and United States revenue was defrauded.

I have already spoken of the change to this city from 1860 to 1866, and of the gradual decline of business since that date, and of the gradual change back to Brownsville in the last few years. As to smug-

gling having been the rule of business in those days I cannot say. Certainly enough was done. But in these days instead of smuggling being the rule it only plays a petty part. The great bulk of the business in this city, in fact all except a small and indeterminate amount, goes through the custom-house in a legitimate way.

Of course human nature is no better here than in other parts of the world, and it may in some respects be not quite so good as the average, but the risks in smuggling large amounts out of Matamoros are so great that it does not pay, and as a result it is only done in small amounts.

The question of the free belt presents within itself all the characteristics of our relations with Mexico.

We find that the local authorities in establishing the free belt acted in defiance of, and totally regardless of, the national government. At that time a struggle was going on in the country between the liberal party and the church party, known as the war of reform. Neither party could afford to break with the people of Tamaulipas. When Juarez and the liberal party predominated in 1860 they did not at first sanction this measure, so openly hostile to the United States.

But our civil war broke out and the Mexican Congress in 1861 formally ratified the decree of the Tamaulipas authorities. In 1870 an attempt was made in the Mexican Congress to revoke the law because the cities of Tampico and Vera Cruz protested against it, and the national revenues were seriously affected by its operation; but the delegates from Tamaulipas threatened armed resistance, and Congress, instead of repealing the obnoxious system, voted in favor of extending the limits of the Free Zone. The project of law so voted, failed to go into effect only on account of the non-concurrence of the execution.

This is a recital of facts and stands unchanged.

The delegate, Ramon Guzman, referring to the American complaints, said (Appendix, p 313): They argue (meaning the Americans) that the maintenance of the Free Zone is a serious detriment to their views for the future, and that fact speaks louder in its favor than anything my feeble voice can utter.

That the Zona was, and still is, favorable to Matamoros and the other towns in it, and that it was detrimental to American interests is unquestionable. However, the changes in the tariffs of the two countries and the increased demand for American productions so modified this state of affairs that, as I show in discussing paragraph 4, I consider the American has now a positive advantage over the Zona merchant.

Passing paragraphs 9 and 10, which require no discussion, I come to paragraph 11.

In 1870 the President called the attention of Congress to this hostile measure, continued in defiance of all protests. In May, 1870, a committee of the Senate made a report on the subject (Appendix, p. 298), from which report we take the following statement:

"Since the close of the war the Zona Libre has served as a base from which smuggling into the United States can be safely carried on. * * *

"Honest merchants, unable to compete with the smugglers, have been compelled to abandon the country or to engage in illicit trade themselves, and the whole community on both sides of the river has become so thoroughly demoralized that smuggling is generally considered a legitimate and honorable business. The desperate character whom this condition of things has attracted or created, plunders private citizens as well as defrauds the government."

1. The Zona has been, and still is, and must continue to be, a base from whence European goods, brought in through the United States, may be smuggled back into the United States so long as the Zona exists or so long as these goods are dutiable in the United States.

2. Merchants on the American bank cannot compete with the Zona merchant in the sale of these goods, and his sales of American goods and of duty-paid foreign goods are thereby affected.

3. Not noted in the paragraph, but pertinent thereto, is the question, whether or no this depot of foreign goods on the right bank of the

river requires an additional force of United States revenue officers to prevent their being smuggled back into the United States.

I have given what appears to me to be the three American arguments against the Zona Libre. The abolition of the Zona would, of course, do away with the whole case. Any notable reduction of the American import duty of any of these articles would remove that article as a factor.

1. It is claimed, and I have stated, that the Zona is a base from whence these articles may be smuggled back into the United States. So, for the matter of that, is Canada, where some of these articles have to pay a smaller import duty than in the United States; so, also, are France, England, the Havana and other countries where these goods are produced.

The same care on this frontier will as well prevent the return of these goods as will prevent their introduction on the Canada frontier, or at New York and other ports in the United States.

The convenience of transport and demand will make the profit, and, therefore, the temptation as great or even greater at New York than at Brownsville or Laredo.

2. Merchants on the American bank cannot generally pay duty on foreign goods and compete in price with the Zona merchant. But this is not always true, as there are several old established houses in Brownsville which import wines, brandies, cigars, &c., and do a good business.

I can name persons in this city who, from motives of economy, send to New York to buy duty-paid linen and other goods, named by me, and get them laid down here at retail cheaper than they can be bought here.

There are some residents of Brownsville who buy in Matamoros, and get their purchases delivered by the regular smugglers in petty articles. There is in this, however, so much risk that it is not always profitable.

Of course any such business is detrimental to the local American trade and to the customs revenue of the United States; but, as I have previously stated, the same thing occurs on the Canada frontier and at other ports of the United States.

It must not be thought that the Zona is in effect laying France or the Havana alongside of New York, because the time and expense involved in getting goods laid down, added to the risks of doing business in Mexico, make the cost in many cases as great as the duty paid New York price.

3. Another consideration as to the Zona is whether or not its existence does not require some more care and employés on the return of these bonded goods than would be required to prevent only the introduction of the Mexican products dutiable in the United States.

It is probable that some more labor and care are required, but in my opinion only a very little. I am also led to believe that as regards smuggling out of the Zona and into the United States the value of dutiable Mexican products so smuggled, such as live animals, mescal, piloncillo, wool, beans, corn, &c., is at least twice that of the European goods brought through in bond.

I am also of the opinion that with a suitable increased force of inspectors, with some increase in their zeal, energy, &c., &c., this total of unlawful imports might easily be reduced one-half.

I have thus far stated fully, so far as I can see them, all the facts in regard to the establishment and effects of the Zona Libre. I will now endeavor to show what would result from:

1. A continuance of the present law.
2. The abolition of the Zona.
3. The extension of the Zona.

Under the first head: As things are now the advantages of the Zona law are largely overcome by the excessive and steadily-increasing taxation.

The "derecho de bulto" of last November put on a gross-weight duty of ¼ to ½ cent per pound on goods imported into the Zona.

There was by the Zona law one-half cent per pound and 1.37 per cent. of the regular duty to be paid on importation. The stamp law for custom-house documents is very expensive. The internal revenue stamp law now in force is as burdensome, all things considered, and fully as annoying as was that of the United States in 1865.

I omit one law taxing sales, which, though promulgated, is not, I understand, enforced at present.

The State of Tamaulipas has what is really an occupation tax fore very ranch, whether agricultural or grazing, for every herd, flock or drove. Every person whose annual salary is $100 has to pay a portion thereof to the State. This tax is so far-reaching that it affects the servants that sweep, dust, and go on errands in public offices. Lawyers, doctors, preachers, notaries public, &c., &c., have also to pay a tax.

The city of Matamoros has its own system of taxes for local expenses, to all of which 25 per cent. federal is added.

Every load of wood or produce which enters the gates of the city has to pay a small sum. Every waterman, whether he rolls his water barrel or has a mule, must pay his tax. So, also, the carriage-drivers, milkmen, street hawkers and a long list of others.

Then there is a separate tax for the public schools and a tax upon real property. The worst of it is that while you are honestly paying your tax, your neighbor, who happens to be an *anigo* of some one has got his tax reduced or is not paying at all. This sort of thing is rather exasperating, but the finale is still worse. They find that the city is running behind and the tax is increased for those who have been paying. Then, too, there is so much back action in the tax business. You may run along smoothly for a third of a year only to be brought to pay arrears of taxes which had been forgotten. This, however, is not very common, but does occur.

Worse than all this is the fact that in spite of many good endeavors they are nearly always coming out behind. State or city is the same. It seems all but impossible to make both ends meet.

All these things tend to make living expensive, and necessarily to raise the prices of goods on sale. These conditions are increased by the risks of fines, delays, &c., in dealing with the custom-house. This is only a grazing country, and nearly everything for food, clothing, or for other wants must be brought in from a distance.

Outside of the stock industry and its location as a border and garrison town and State capital, Matamoros, as well as all the towns on the whole frontier, derives its importance from being a sort of toll-gate, through which pass the imports and exports of the interior. Add to this that all transactions are in silver, which is cheaper than gold, and that exchange is always from 5 per cent. to 10 per cent. premium over and above this difference of money, and it will be seen that in many instances prices for goods even, if they have not paid regular import duties, are necessarily very high.

These conditions do not change for the better, but, on the contrary, their tendency is strong in the other direction.

Under all these circumstances it will be seen that the American merchant, with his secure government, low taxes, and liberal and honorable treatment in the custom-house and courts, has an immense advant-

age over the Zona merchants in everything, except in those goods which are in demand on this frontier, and which pay heavy import duties in the United States. These may be noted as wines and liquors, cloths, cassimeres, linens and laces, Havana cigars, rugs, other manufactures of wool, manufactures of silk, French gaiters, fancy articles, sardines, olives, French fruits and some other.

Any change in the United States tariff, taking off or materially reducing the import duty on any of the articles enumerated above would, of course, reduce the Zona merchant's present advantage in the sale thereof.

It seems highly probable that within a few years the tariff on several of these articles will be thus reduced or taken off.

The energy and skill of the American producer is year by year competing more and more in all of the articles above named, and this improvement is destined to rapidly increase. This will enable the American merchant to offer American goods on the American side at rates much less than the Zona merchant can offer them, and by this increased competition of American goods the demand for European goods will steadily diminish.

As the Zona merchant cannot sell American goods or duty-free European goods as cheap as the American merchant, his line of profits will grow steadily smaller year by year.

Briefly, then, I believe that if the Zona is continued as it now is, there is as good a chance for the American as for the Zona merchant, and that in the future the American merchant is likely to have a positive advantage.

Under the second head. If the Zona were abolished the necessaries of life, from calico, potatoes, flour, and lard, all through the list, would be so increased that life here would, so to speak, be hardly worth living.

I recall my observations in the fall of 1879, in Eagle Pass, Texas, and Piedras Negras, Mexico.

The latter town is above the Zona and therefore the full duty is payable on importation.

The town was stagnant, no movement, no energy, and no commerce. Houses were falling down, stores closing, people were moving away or else slowly starving, and a mark of utter desolation and decay was upon the whole place. I looked into the three or four principal stores in the city of say 2,500 inhabitants. The largest stock was not worth $1,000. In the whole city there was for sale but a single piece of calico, and that had been brought in from Eagle Pass by a customs officer, but the pattern not suiting he had sent it to my host's store to sell for what it would bring.

Everybody wore calico, everybody used cotton cloth, they ate potatoes, drank coffee, used sugar, &c., &c., but they did not buy them in Piedras Negras. While at dinner my hostess pointed out the various articles on the table and mentioned that the meats and a couple of salads, some peppers, the cows and the goats' milk, and the brown sugar were Mexican products. The rest Antonio, the cook, bought in Eagle Pass and smuggled over.

She had a woman cook because a woman could better secrete the next day's supplies than a man, and she added, with a smile, that she believed the female mind was more adapted to such work than the male mind.

Antonio in those days was expected to carry to Eagle Pass, each evening, 16 eagle dollars (there is an export duty of 5 per cent. on silver) and buy one dollar's worth of provisions for the return journey. She had done it many times and had never met with any misfortune.

Of course my friend said, if she should be caught two or three times he would have to put some one else in her place and keep her in the house for a few months. He had lost money a few times by having it seized, but never from the treachery or dishonesty of a servant.

In passing to and from Eagle Pass to the river bank, if one stepped out of the main paths, women and men could be seen half hidden behind a clump of bushes arranging articles on their person so as to pass the Mexican guards after crossing the river. This system of smuggling into Piedras Negras was nearly if not quite universal, and extended to every article which was dutiable by the Mexican tariff.

The desolation of Piedras Negras gave me a more friendly feeling toward the Zona Libre, and I have many times wished, in pity for the residents of the Mexican side, that the Zona could be extended west to the Pacific coast and south to Guatemala.

The abolition of the Zona would make living so expensive that a considerable number of the present residents would have to leave. Some of them would go to the American side and others to the interior.

Instead of buying the duty-paid goods on the Mexican side, nearly all the retail purchases would be made on the American side and then smuggled in. It would be impossible to stop this smuggling unless the river was guarded night and day along the whole line and every person searched. This would of course be impracticable, and, as a result, the retail trade of the Zona merchant would be destroyed and a portion of it transferred to the other side.

The trade of the Zona merchant with the interior towns would be almost entirely cut off, as the purchaser could and would prefer to pass to the American side, where he could purchase much cheaper. If he chose to import his goods regularly he could do it through a broker, and on the same terms as the Matamoros merchant. If he preferred to carry his custom-house along with himself he could choose his time and place for crossing, and run his risks of getting safely through. By this change the American merchant would gain in retail trade, but the great loss in value of property, the closing of homes, and the breaking up of many houses on the Mexican side would so diminish the purchaser's ability that the gain would not be more than half the Zona merchant's loss. Again, merchants are vitally interested in the prosperity of their customers.

The wholesale interests of Brownsville are five to the retailer's one, and with the financial ruin wrought by the abolition of the Zona the sales of the wholesalers would be greatly reduced. The almost free consumption of goods in the Zona would be reduced almost if not quite 50%.

As this Zona consumption is largely American, and is growing more largely American each year, this would be closing a considerable market for American goods.

I sum up as, in my opinion, the effects of the abolition of the Zona, a small increase in the retail trade on the American side, a considerable reduction in the business of the wholesale frontier dealers on the American side, and a serious diminution in the consumption of American products. The latter two, in my opinion, have a relative importance to the gain to the retail trade as five to one. That such a loss of consumption would result is too plain a fact to need illustration, as these people cannot pay an additional duty price of 70% to 110%, and still continue to use the same amount as before.

The direct effect on the inhabitant of the Zona by the abolition of the Zona I have already mentioned. It would simply reduce all values on an average of 50%. This includes not only houses, stores, business, properties, but lands and stock.

The further effects would also be serious. The residents of the Zona are not a peculiarly tractable people. The financial ruin would breed smugglers, robbers, and general outlaws, and place the whole of the border in a ferment. To be sure, the Mexican Government is now, if it has not always been, strong enough to put down any open revolt, but it cannot put down the discontent and bad feeling which would result.

The Zona would then be a thorn in the side of good government and a wedge, and that, too, in a particularly bad place for any future disturbance.

The moral effect on the frontier would be very serious, and with a return of disorder on the Mexican side the American side would again become a base for wholesale smuggling into Mexico and a refuge for political offenders.

One other point might deserve consideration. It is generally believed on this frontier, especially among Mexicans, that the United States has a great desire to have the Zona Libre abolished. They believe that it will never be abolished except at the instance of the United States. Hence its abolition will not only bring financial ruin to the residents of the Zona but it will bring a feeling of bitter hostility against the United States and against American citizens and interests generally. This feeling will not be particularly bitter beyond the limits of the Zona, although it will by no means be entirely confined to the Zona. While it may pass unnoticed for a time, yet it may on proper occasions prove to be of considerable importance.

I do not by this last argument suggest that whatever is right be not done because of fear of such ill-feeling, but only to state what are likely to be the full effects, so that it may be considered as one of the elements of the subject.

Under the third head, the extension of the Zona Libre.

While in the United States last year my attention was invited to a remonstrance of certain residents of Texas against what they termed the probable extension of the Zona Libre. I have since heard of the proposition as being to extend the Zona back to some or all of the cities of Victoria (Tamaulipas), Monterey, Saltillo, Piedras Negras, the Presidio and the Paso del Norte, and Chihuahua.

Were I a Mexican resident, or interested in the development and prosperity of this frontier, I should be enthusiastically in favor of the project. It is its only chance of anything like evenhanded competition with the left bank. Without that or some great change in the Mexican tariff laws the contrast between the two sides of the river will be as great as between a brick block and a jacal.

Were I a wholesale dealer in any American town on or near the border I should also be in favor of the extension, because in those towns dealers could buy two dollars' worth of my goods, where heretofore they could, from the high duties, only buy one dollar's worth. I should presume that by my nearness, my knowledge of both the American market and of the Mexican merchant, I would be able to secure a large share of this increase in purchases.

American manufacturers of goods which are now sold or are likely to be sold on this frontier should be in favor not only of the extension of the Zona which I have mentioned, but of a further and, for the matter of that, an indefinite extension.

So, also, the wholesale dealers of Saint Louis, Chicago, Cincinnati, New York, New Orleans and Galveston, because the moving back of the Zona limits is like opening a gate through which at light expense they can lay down their wares at such prices that the Mexican consumer will consume two dollars' worth where before he used but one.

The retail dealer on the American side of the river opposite where is now the Zona will hold his own as at present and only gain as the demand for American goods increases.

Opposite where is not now the Zona the mere retailers would at first lose one-half of their trade. But even this loss would in part be made up to them. The mutual interests of the two banks are many, and the increased prosperity and values on the Mexican side, the impetus it would give to mining, agriculture, &c., would in turn greatly benefit all classes on the American bank.

CONCLUSION.

It has been the fashion to denounce the Zona Libre. I am not in anywise a defender of it. I would be glad, however, to see a market for double the present value of goods opened up along this frontier, for with our new railway system any increase in the capacity for consumption means a largely increased demand for American goods.

The objection has been made that a Zona Libre is wrong, *per se*, and as an incentive and an opportunity to smuggling into Mexico.

So far as I am able to judge the amount of smuggling into Mexico in the Zona Libre is much, very much, less than it would be were the Zona abolished. I also believe that the extension of the Zona to Piedras Negras would decrease the smuggling from the United States into Mexico at that point.

As to the actual, not the comparative, wrong, it may be said that the whole Mexican tariff is a wrong, and that therefore the more Zona Libre and the less full tariff the more the wrong is decreased.

So much has been said against the Zona and so unanimous has been the opinion, that I hesitated a long time before writing this article, which, while it only aims to present all arguments for both sides as I am able to see them, is yet more favorable than anything I have heretofore read.

WARNER P. SUTTON,
Consul.

UNITED STATES CONSULATE,
Matamoros, June 24, 1882.

ADULTERATION OF WINE AND BRANDY IN FRANCE.

REPORT BY CONSUL GENERAL WALKER, OF PARIS.

As the French law prohibits and punishes all adulteration of wine and other alimentary substances, there is officially, or under the law, no such articles exported, and it is consequently impossible to ascertain what percentage of falsified French products are sent to the United States, or elsewhere. Still no doubt can be entertained as to this adulteration taking place, as will be shown further on by a report furnished me by the prefect de police of the department of the Seine, of monthly analyses made of alimentary substances at the municipal laboratory of the city of Paris.

Before submitting this report, I desire to present other information of a general character pertinent to the subject.

Wines and liquors imported into France are subjected to an analysis at the customs before delivery to the importers, and if found adulterated are not admitted to entry, and in many cases are destroyed. In the case of exports there is no inspection of this kind, and bad wines and

liquors may be exported to the United States or elsewhere with impunity, as long as the countries importing do not adopt the same precautions against falsified commodities as are in vogue in French ports.

In many cases these imitations are so perfect in taste and color that it is impossible, without a careful analysis, to discover the fraud, and even then, as in the case of adulterated brandy, which often undergoes the process of redistillation after foreign substances have been added, it is very difficult, even by a chemical analysis, to detect the deception.

It is well known that the greatly diminished production of grapes in France, owing to the destructive ravages of the *Phylloxera* has led to an enormous importation of wines from Spain and Italy, for the purpose of admixture and manufacture. But the deficiency in the yield of the native wines has led also to a very extensive use of raisins and currants in the production of wine.

It is said that in the process of drying these fruits lose nothing but water, and the method of their conversion into wine does not differ from that applied to grapes, only that previous to fermentation pure and often distilled water is added in such proportion as to make good the previous loss. The soaking is deemed to have been carried far enough as soon as the raisin has assumed the appearance of a fresh grape.

The usual process of fermentation, sulphurising, and clarifying, &c., is then followed. The product is, however, never red, like ordinary claret, but white, or almost straw colored. It is, however, generally colored by artificial means, and frequently by use of deleterious and sometimes, it is said, very injurious compounds.

When the manufacture of this raisin wine was first attempted, the authorities treated the practice as an offense against the law. Now, however, all hinderances to it have been removed.

The following tables of the analysis of wine, alcohol, and liquors, made at the municipal laboratory of Paris, show a certain degree of adulteration of these articles, but do not show the means used.

For these processes of alteration, falsification, coloration, &c., which appear after the tables, I am indebted to the valuable work of Messrs. Chevallier and Bandrimont, professors of the superior school of pharmacy of Paris, &c., entitled, "*Dictionnaire des Altérations et Falsifications des Substances Alimentaires, Médicamenteuses et Commerciales, avec l'indication des moyens de les reconnaître.*"

Analysis of wine made at the municipal laboratory of Paris.

Months.	Good.	Passable.	Bad.	Total.
1881.				
March	23	59	136	218
April	8	29	106	143
May	6	41	184	231
June	14	123	318	455
July	15	188	209	412
August	23	155	225	403
September	23	99	185	307
October	88	152	*183	423
November	(†)			
December	79	146	‡185	409
Total	279	991	1,731	3,001

* Of which number 27 are falsified. † No report. ‡ Of which number 39 are injurious.

Analysis of alcohol and liquors made at the municipal laboratory of Paris.

Months.	Good.	Passable.	Bad.	Total.
1881.				
March	(*)			
April	2		1	3
May	3	4	7	14
June	3	6	6	15
July	2	1	2	5
August	1	1	5	7
September	5	3		8
October	1		1	2
November	(*)			
December	7	3	†10	20
Total	24	18	32	74

*No report. †Of which number 3 are injurious.

Analysis of wine made at the municipal laboratory of Paris.

Months.	Good.	Passable.	Bad.		Total.
			Not injurious.	Injurious.	
1882.					
January	50	111	99	21	281
February	69	157	99	57	382
March	111	178	176	29	494
April	50	98	101	4	251
May	91	141	194	34	461
Total	372	683	669	145	1,869

Analysis of alcohol and liquors made at the municipal laboratory of Paris.

Months.	Good.	Passable.	Bad.		Total.
			Not injurious.	Injurious.	
1882.					
January	6	6	4	3	19
February	3	1	2	1	7
March*					
April*					
May	2		1		3
Total	11	7	7	4	29

*No report.

Wine may become prejudicial to the health in consequence of natural or accidental alterations or by falsification.

WINE ALTERATIONS.

Wine is subject to numerous alterations through natural and spontaneous causes.

Natural and spontaneous.—The excess of acetic acid in wine is sometimes so great as to make the wine undrinkable. This acescency is

produced by a microscopical fungus called the *Mycodernea acetic*, which develops itself by the presence of oxygen in the air. This acid in sour wine is taken off by distillation, or by adding a certain quantity of *neutral tartrate of potash* (200 to 400 grams for 230 liters), which with the acid in excess forms acetate or bitartrate of potash.

Sometimes wine assumes a brown or bluish color, and becomes more or less turbid. This alteration may be preventable by adding a sufficient quantity of *tartaric acid* to bring back the normal acidity and color, or by racking it off into sulphureted barrels and adding a small quantity of brandy, and clarifying it afterwards. At other times wine loses its natural limpidness and becomes flat and insipid by undergoing a fermentation which gives it a vicious character.

This defect is remedied by adding a certain quantity of tannin (about 15 grams for 230 liters), or unripe and bruised service berries (500 grams for 230 liters), or nutgalls in powder (50 grams for the same amount of wine). At other times wine becomes bitter, and to take away this taste lime is used.

Accidental alteration.—Wine does not always withstand the movement and variation of temperature which it is often subjected to during voyages. It is frequently affected by the maladies heretofore described, especially among light wines. In order to prevent these alterations, shippers are obliged to add 2 or 3 per cent. of brandy.

It is sometimes discovered that wine after a sea voyage contains a certain quantity of salt water, either fraudulently introduced into the barrels or by absorption from their contact with that element. In that case the chloride of sodium is precipitated by means of an acid solution of nitrate of silver.

In many cases the wood of which wine barrels are made produces a certain alteration of the wine. These woods may contain cerine, quercitrine, tannin, gallic acid, extractive and bitter matter, mucilage, liqueous albumen, carbonate and sulphate of lime, alumine, and oxyde of iron and silica. American wood has no apparent action upon wine.

Wine has been known in some cases to become decomposed by the glass of the bottle containing it; the glass being imperfectly finished, may impart alkalies to the acids of the wine, which may also attack the alkaline sulphurets not carried off by the vitrifaction, and thus communicate to the wine a sulphurous taste.

Wine may contain salts of lead, due to the lead pipes through which it passes in its transfer from the vats to the barrels. Wine containing lead compounds has a sweet and styptic taste, and has little color. The presence of lead in wine is easily discovered by adding a solution of sulphureted hydrogen, which lets fall a dark and flasky sediment of the sulphide of lead.

Wine sometimes contains copper, of which the presence is due, 1st to the copper tubes and other fixtures used in wine cellars; and, 2d, because brandy containing salts of copper in solution, produced by the copper still through which it passes, is added to it.

In order to discover the presence of this salt one liter of wine may be boiled for one hour with one gram of pure reduced iron, which precipitates the copper or lead. The precipitate is carefully taken off, washed, and treated by diluted hydrochloric acid, which takes off the iron and leaves the other metal. In treating again this new residue with a small quantity of nitric acid, a solution is obtained, where it becomes easy to distinguish the presence of lead and copper.

Artificial adulteration.—When wine is wanting in quality, or degen-

erated, or having a disagreeable taste, it is often mixed with other wine in order to improve it, and in order to transport light and delicate wines, stronger wines or brandy are added to give them the necessary strength. Such mixing or blending is not always prejudicial to the quality of the wine; but sometimes it may produce double decomposition of the saline element of the wine and change its taste and bouquet. Only an educated taste could possibly distinguish the different kinds of wine composing the mixture; chemistry does not furnish any precise means to that end.

Falsification of wine.—Among alimentary substances, wine is most often falsified, notwithstanding the severe surveillance of the authorities. Such falsifications are of old date in this country, going back, in fact, to the Roman period.

Wine is falsified by adding water, cider, alcohol, sugar, molasses, tartaric, acetic, and tannic acids, sulphuric acid, lime, alum (sulphate of alumina of potash), sulphate of iron, carbonate of potash or of soda, chloride of sodium, coloring matters, bitter almonds, or leaves of the cherry laurel, to give to the wine the taste of the hazelnut, and frequently wine is made from pressed lees. Wine, so called, is also entirely made of other substances than the grape, and therefore an article is often sold in the markets which does not contain any true wine. The result of the fermentation of the juice of the grape is imitated by means of fermentation with water of sugared substances, such as sirup of fecula, dried fruits, raw sugar, &c., or juniper berries, coriander seeds, and fresh rye bread. After fermentation the liquid is racked off, and if it is not sufficiently colored, an infusion of red beets or myrtle berries is added.

A liquid is also sold as wine which is manufactured of water, vinegar, and logwood, with $\frac{1}{9}$ or $\frac{1}{10}$ part of common wine from the south of France, which is added to cover the fraud.

In order to correct the acidity of wine, some unscrupulous dealers make use of litharge. The result is, the persons who use their wines are often subject to gripes or colic, such as afflict painters.

Sweetening of wine.—In wet and cold seasons, grapes produce wine without alcoholic strength or bouquet; and in order to correct this defect and to increase the alcoholic degree, sugar is added to the must. Such addition would not prove injurious if sugar of good quality were used instead of the glucose often employed for such purpose, of which the fermentation introduces into the wine, besides the ethylic alcohol, a certain proportion of other homologous alcohols which are injurious to the health.

Alcoholization of wine.—The alcoholization of wine, according to the report made to the Academy of Medicines of Paris, by Dr. J. Bergeron, on the 16th May, 1870, is a practice which has been made necessary and will be for a long time continued in France on account of inferior wines, and of the process of culture and manufacturing of the wine. That addition gives to feeble and acid wines a certain strength and quality required for its preservation and transportation. On the other hand alcoholization is frequently attended with bad and dangerous results. It introduces into the wine a proportion of alcohol which, not having been intimately associated with the other elements of the must by fermentation, maintains its own character, and transforms the wine into an exciting, stupefying beverage, the continuous use of which is evidently injurious.

The danger of alcoholization is increased when distilled spirit of grain, beets, and molasses are used instead of alcohol from wine.

It is very difficult to prove from chemical analysis that this alcoholization has been practiced.

Falsification by the use of lime.—In certain departments of France (especially in Herault, Pyrenees, Orientales, and Var) lime is used to heighten the color of the wines, to reduce the lees, and to prevent the alteration which might be caused by transportation.

Some examples seem to prove that the introduction of lime into wine is prejudicial to the health of the consumer, that it is unnecessary for wine of good quality, and that it is applied only to wines of bad taste and having no strength, and such as are produced by molded or unripe grapes, or to wine having too much color or too much tartar.

Lime greatly modifies the nature of wine by substituting to the bitartrate of potash a purgative salt. Some chemists have proved that lime, acting upon the tartaric acid of potash, produces bisulphate of potash, which possesses corrosive and toxical properties.

Alum.—This is sometimes added to wine to heighten its color, to clarify, and to put it in better condition for transportation, also to give it a styptic flavor or taste, as that of Bordeaux wine.

Sulphate of iron.—The addition of this article has sometimes been made, but not often, as it gives the wine a dark color.

Coloring matter for wine.—The coloring matters for wine generally used are dwarf and black elderberries, myrtle and phytolacca berries, Brazil and Campeachy wood (logwood), beet juice, rose mallow, ammoniacal cochineal, fuchsine, &c. The latter is one of the aniline colors. But the color most used is the grenat, the residue of the fabrication of fuchsine, of red or violet aniline and rose aniline salts. There are few substances sold for coloring wine which do not contain, under fancy names, residues of fuchsine mixed with sirup of glucose, caramel (burnt sugar), extract of beets, carmine of cochineal, &c. Very often these tinctures contain arsenic produced in the manufacture of fuchsine and its compounds.

Brown grenat imitates as perfectly as possible the natural color of wine, and its elements are very nearly the same.

Fuchsine or aniline red is easily detected in wine by mixing 50 centiliters of it with 120 centiliters of wine, and adding 10 grams of subacetate of lead and 20 grams of amylic alcohol; shake the mixture well, and after it has settled it will retain its red color if there is any fuchsine coloring matter in it.

Dwarf and black elderberries are much used in Portugal, Spain, and in north and south of France. These berries give the wine a slightly purgative character. The phytolacca berries used as coloring matter also contain a drastic principle.

The aqueous extract of beets is seldom used alone, but in connection with fuchsine and cochineal, to disguise these colors, which are largely employed, especially in the south of France, to heighten the color of wine.

Decoctions of logwood added to young wine give it the color of old wine. In Paris it is used to a great extent in the manufacture of artificial wine. Where calcareous water is used for that purpose the color of the composition is a bright reddish violet.

WINE ANALYSES.

The following table shows the color of the precipitate produced by divers reacting substances in wine artificially colored:

Names of coloring matters.	Reactions with potash (Chevallier).	Reactions with potash (Naes d'Eseabeck).	Reactions with sulphate of alumina and other carbonate of ammonia (Jacob).	Reaction with the subacetate of lead (Jacob).
Dwarf elderberries ..	Violet precipitate.	Violet precipitate.	Light violet precipitate.	Bluish gray precipitate, the liquid assuming a violet color.
Mulberries	....do	....do	....do	Do.
Logwood	Reddish violet precipitate.	Rose-colored precipitate.	Dark violet precipitate.	Light blue precipitate.
Pernambuco wood ...	Red precipitate ...	....do	Rose precipitate, more or less dark.	Red precipitate.
Beets	....do	... do	....do	Do.
Rags dipped in juices of cotton tinctorinum and fomented and exposed to decomposition in wine.	Light violet precipitate.	...do	Rose carmine precipitate.	Bluish gray precipitate.
Wine colored privet (phytolacca) berries.	Blue violet precipitate.	Brown violet precipitate.	Light green precipitate.	Dull green precipitate.
Pokeweed	Yellow precipitate	....do	....do	Do.
Logwood	....do	Brownish gray precipitate, turning dark by an excess of alkali.	Slate-colored gray precipitate, more or less dark.	Dull gray precipitate.
Myrtleberries.....	....do	Bluish gray precipitate.	....do	Do.
Brazil wood.....	....do	Violet gray precipitate.	....do	Do.
Black elderberries...	....do	Violet precipitate.	Bluish gray precipitate.	Dull green precipitate.

In order to ascertain if wine is colored with black elderberries, Mr. Velain has proposed the employment of acetate of soda, which gives to it a rose-lilac color. If the wine was pure it would assume a blackish color.

FALSIFICATION OF BRANDY.

The liquor to which is given the name of brandy ought to be made only of alchohol of wine of 50°, but most of the brandy of the present day is a wretched mixture of substances with alcohol not made from wine.

To give to brandy a more pungent taste dealers add to it black and long pepper, powdered or extract of ginger, pimento, pellitory of Spain, stramomium, darnel (tare), alum, and cherry-laurel. Brandy is frequently made of a mixture of alcohol of fecula and water, colored with burnt sugar (caramel), the juice of the green shell of the walnut, and catechu.

One of the formulas in use for the manufacture of artificial brandy is as follows:

	Grams.
Catechu in powder	250
Sassafras	468
Flowers of furze (broom)	500
Swiss tea	192
Hyson tea	128
Capillary plant of Canada	128
Green licorice	500
Italian iris (orris)	16
Alcohol of 33° ..... liters ..	6

Swiss tea is an infusion of equal parts of wormwood, betony, mountain bugle, common bugle, mentha calamintha, rosemary, arnica flowers, and some twenty other plants, the mention of which would be not only tiresome to the reader but of no practical utility.

To give to brandy a bouquet, sulphuric acid, ammonia, and acetate of ammonia are used; such are the substances known, but many other means are undoubtedly used, which are only known to the trade.

Mr. Wiederhold gives the following directions for distinguishing genuine from artificially made brandy: Genuine brandy gives an acid reaction, while the other does not, and it produces, by means of a diluted solution of perchloride of iron, a very dark coloration, while in the false brandy, after a certain time, the precipitate assumes a doubtful color.

GEORGE WALKER,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
Paris, France, July 7, 1882.

TRADE OF DUTCH INDIA.

REPORT BY CONSUL ECKSTEIN, OF AMSTERDAM.

The recent action of Congress in abolishing section 2501 of the Revised Statutes, imposing an additional duty of 10 per cent. ad valorem on goods, wares, and merchandise of the growth or produce of the countries east of the Cape of Good Hope, when imported from places west of the Cape of Good Hope, has induced me to gather some facts and figures relating to and showing the principal articles grown or produced in the Dutch East India colonies, and to what extent such articles have been imported into and re-exported from the Netherlands during the year 1881.

On the 1st of January next the act abolishing the above-mentioned section of the law will go into effect, and as it is quite possible that the markets of the United States, with respect to various important articles of commerce, will thereby be considerably affected, the information contained in this report may prove to be of some interest or value to interested parties in the United States.

Up to the present the exports from this country to the United States, of articles the growth and product of its colonies, have been fluctuating, irregular, and unsteady.

At different times some articles, such as coffee, tin, gum copal, gum dammar, India rubber, &c., have, however, been more or less extensively shipped.

In how far the hitherto and still existing discriminating duty of 10 per cent. has prevented, and still prevents, a larger and more regular export trade from this country to the United States in the articles in question, I am not able or prepared precisely to say, but judging from the long-continued and strong efforts of parties here, interested in the East India trade, to get this 10 per cent. duty out of the way, it would seem to me that it was to a certain, if not large, extent owing thereto.

The principal articles, the growth and product of the colonies, are coffee, sugar, tobacco, tin, tea, indigo, spices, drugs, dye-woods, and hides.

COFFEE.

The imports of Java, Sumatra, and Celebes coffee, in 1881, were as follows, viz:

By Netherlands Trading Society.		By private importers.	
Java.....bales..	952,800	Java.....bales..	188,700
Padang (Sumatra).....do...	500	Macassar.....do...	58,900
Menado (Celebes).....do...	10,700		
Macassar (Celebes).....do...	13,400		
Bales.....	977,400	Bales.....	247,600

Total imports, 1,225,000 bales.

The official estimates of the crop of Java coffee for 1882 place the same at 855,100 piculs. Sumatra produced, in 1881, 109,000 piculs Padang coffee. Prices throughout the year 1881 are said to have been extremely unsteady.

TOBACCO.

The imports of Java tobacco in 1881 amounted to 149,621 bales, and of Sumatra tobacco to 64,806 bales. The sales during the same year amounted to 139,292 bales of Java and 65,236 bales of Sumatra.

The prices obtained took, as usual, a very wide range, being, for Java, all the way from 10 to about 100 cents, Dutch currency, per half kilogram, and for Sumatra from about 30 to 150 cents, same currency and quantity.

SUGAR.

The following statement shows the imports and exports of Java sugar in 1881:

	Kilograms.
Imports	36,836,000
Exports, and countries whither:	
To Belgium	9,958,000
To Sweden	6,696,000
To Germany	870,000
To Great Britain	630,000
To France	569,000
To Russia	1,000
To other countries	21,000
Total	18,745,000

The prices ranged during the year, in entrepôt, per 100 kilograms, as follows, viz:

For low numbers, from 22½ to 25, and from 25 to 27 florins; for middle numbers, from 31 to 33 florins; for high numbers, from 33 to 35 florins.

TEA.

The imports of this article in 1881 are said to have consisted of 25,775 quarter chests, weighing each about 45 kilograms. The same has been, and usually is, principally sold and re-exported to England, Constantinople, and Ost Friesland, in Germany.

Green tea is scarcely ever brought to this country from Java; and, as it is represented to me, it is only black tea that the planters there can produce to advantage.

HIDES AND BUFFALO SKINS.

The number of hides imported in 1881 was 227,648, and the number of buffalo skins, 109,627.

Hides are, and hitherto have been, principally sold and re-exported to Germany and Poland; and buffalo skins to Russia, England, and Germany.

Very light Java hides, weighing from 2½ to 4½ kilograms, are always in great demand, and bring as high as from 60 to 80 cents, Dutch currency, per half kilogram.

TIN.

The production of Banca tin in 1881 was 64,190 piculs. The imports of the article into the Netherlands in 1881 consisted of 140,824 blocks or slabs, and the re-exports to 149,688 blocks. The price it commanded is given at from 51¾ to 67½ florins per 50 kilograms.

The production of Billiton tin in 1881 was 66,331 piculs. The imports into this country in same year consisted of 92,281 blocks, and the re-exports of 121,184 blocks. Prices from 51 to 67 florins per 50 kilograms.

INDIGO.

The imports of indigo in 1881 amounted to 5,189 cases, weighing each about 70 kilograms; and re-exports were, during the same period, 5,681 cases. Good qualities sold at from 4.70 to 5.20 florins, and fine to finest quality at from 5.60 to 6.75 florins per half kilogram. A poor quality of this article is, I am informed, seldom produced in Java; the manufacturers of it there making it their special object to turn out a fine quality.

It is said that many carmine manufacturers in Europe use now Java indigo exclusively. Within the past two years small quantities have also found their way to the United States.

DYEWOODS.

The imports of Sapan redwood in 1881 consisted of 28,000 kilograms—price 5¼ florins per 50 kilograms; and of 16,000 kilograms Radiang yellowwood—price 5½ florins per 50 kilograms.

SPICES.

The following statement shows the imports, re-exports, and ruling prices of certain spices, the product of various Dutch India islands, in 1881; weights in kilograms, and prices in Dutch currency:

Articles.	Imports.	Exports.	Prices.
	Kilograms.	*Kilograms.*	*Florins.*
Nutmegs	387,600	260,500	1 30 to 1 65
Mace	110,700	81,600	95 to 1 10
Cloves	121,700	7,500	78 to 1 13
Cassia-vera	240,000	?	17 to 20

The prices in the above statement stand for half kilograms, and, in each case, for good qualities.

DRUGS AND OTHER ARTICLES.

The following statement shows the imports of sundry articles, and the ruling wholesale prices of same, in 1881:

Articles.	Quantities.	Prices.
Bark, cinchona ..... bales..	1,038	From 50 cents to $8 per half kilogram.
Canes, Malacca ..... number..	25,265	Not ascertained.
Cassia, fistula ..... baskets..	907	From 6 to 9 florins per 50 kilograms.
Gum, Borneo ..... do....	270	From 120 to 140 florins per 50 kilograms.
Do ..... do....	102	From 115 to 170 florins per 50 kilograms.
Benzoin ..... chests..	235	From 100 to 110 florins per 50 kilograms.
Dammar ..... do	4,248	About 50 florins per 50 kilograms.
Copal ..... baskets..	9,148	From 8 to 40 florins per 50 kilograms.
Do ..... chests..	1,733	From 8 to 40 florins per 50 kilograms.
Do ..... bales..	689	From 8 to 40 florins per 50 kilograms.
Gutta-percha ..... baskets..	1,411	From 70 to 90 florins per 50 kilograms.
Mother of pearl ..... do....	242	First quality Aroe, from 110 to 118 florins per 50 kilograms.
Do ..... chests..	624	
Do ..... pairs..	43,104	
Rattan ..... bundles..	271,122	From 5½ to 20 florins per 50 kilograms.
Tortoise shells ..... chests..	9	From 8 to 11 florins per half kilogram.
Kapok ..... bales..	5,884	Not ascertained.
Rice ..... do....	73,200	From 9½ to 13 florins per 50 kilograms.

My attention has been called to the fact that there are quite a number of the products of the "colonies" which can be purchased only in this country on account of large advances regularly made to the planters and producers there by bankers and capitalists here, and on condition of their being consigned to them and sold in this country

If the information contained herein is not found to be very clear and comprehensive, it must be ascribed to the fact that merchants and commission dealers in the India trade are extremely reluctant to furnish the required data relating to matters appertaining thereto; and there are no printed official statistics on the subject at my command.

D. ECKSTEIN,
Consul.

UNITED STATES CONSULATE,
Amsterdam, June 30, 1882.

HORSE BREEDING IN NEW ZEALAND.

REPORT BY CONSUL GRIFFIN, OF AUCKLAND.

Ever since the first importation in 1881 of a small number of American trotting horses into Victoria, very great interest has been awakened in the sport of trotting in Australasian colonies. Indeed, it seems that this interesting branch of the turf is becoming everywhere more and more popular. In Victoria Dr. Weir and Mr. James Miller have been very energetic in promoting its interests. The former gentleman is the owner of the celebrated American trotter Primero, and has just completed a splendid track at Elsternivick Park, one of the most beautiful spots in Australasia. At a recent meeting of the leading citizens in Melbourne, it was resolved to give this enterprise every encouragement. The first race took place there last May, and attracted very general attention. There does not appear to be any just reason why this kind of sport should not be as popular with the people as any other kind of racing. It is well knwon that trotting is one of the

three natural gaits of the horse, and indeed, as to that matter, of all quadrupeds, for it enables them to balance themselves with firmness and ease. Perhaps no other gait can give such a free and determined motion to the horse. By trotting his limbs and shoulders are rendered supple and strong, thus enabling him to acquire a quick, steady, and united action.

KENTUCKY HORSES IN VICTORIA AND NEW ZEALAND.

Mr. J. J. Miller recently visited the United States, and while in Kentucky was fortunate enough to procure, among other fine horses, the celebrated trotter Contractor. Contractor was purchased for the sum of $6,000, and his safe arrival in Melbourne created much excitement. He is 15½ hands high, eight years old, and is regarded as a perfect gem. He posseses a good temper and a good constitution, and his breeding properties are undeniable. He is an in-bred Hambeltonian, and is related to Dexter, George Wilkes, and St. Julian, and is said to show back to fifteen strains of the celebrated Messenger, the father of American trotters.

Mr. Miller also purchased a very handsome Kentucky mare of a bright black color, called "Tilda," by Mambrino Patchen, from Edwin Frost's mare, and sister to Rothschild, Silver Chief, and Hail Storm. The Pacific Mail Steamer City of Sidney brought to Auckland on her last trip from San Francisco, eleven thoroughbred American trotters. These horses were purchased in Kentucky for Mr. Robert Wilkins, a gentleman residing at Christchurch, where it is intended to lay down a track. The following are the pedigrees of some of Mr. Wilkins' American trotters: stallion Blackwood Abdallah, bay colt, four years, by Homer, dam by Blackwood; bay colt, yearling, by Harold, dam by Belmont; bay filly three years, by Messenger Chief, dam by Davy Crockett, jun.; chestnut filly, three years, by Vanderbilt, dam by Hughes-Forest; bay filly, four years, by Garrard Chief, dam by Kolmell's Belshazar; bay mare, five years, by Tom Stamps, dam by Bourbon Chief; brown mare, four years, Bay Mambrino; King Fanny by Flying Cloud.

The enterprise at Christchurch, like that of Victoria, is being watched with no little anxiety and in the event of success, which very few now question, there will of course be other and larger importations of this kind of horses from the United States, the home of the fastest trotters in the world. Indeed there is every reason to believe that the importation of American horses to New Zealand will in the near future prove a very profitable industry. Those that arrived here have attracted no little attention. Many flattering notices have been given them in the newspaper press, and the Auckland Herald says: "These Kentucky trotters mark a new era in the history of stock-raising in New Zealand."

CARRIAGE HORSES.

The carriage horses generally in use here have very little to commend them. If a stud were established in Auckland for the purpose of breeding carriage horses, it would, I think, prove a very profitable enterprise. Indeed, such a thing as a good fly or carriage horse is almost unknown in New Zealand, there being only two or three in the entire Province of Auckland, and one of them has been a steeple-chaser. Nor is there anything here like that class of horses, known in America as the cob. The nearest approach to it is the offspring of a mare with a strain of draught put to a light stallion. The production, however, is generally a

very ungainly looking animal, and is never fast in harness. The price of these horses varies from $60 to $250, but a superior animal of this kind would readily bring a much higher price. Ordinary saddle-horses sell here from $50 to $75.

Mr. Robert Creigton, the agent of the New Zealand Government at San Francisco, who always writes with such intelligence and vigor on the trade relations between the United States and Australasia, in a recent communication to the Otago Times, directs the attention of the people of this colony to the superiority of American carriage and buggy horses over those of any other country. He says that the care and attention bestowed upon breeding fast roadsters in the United States have produced the finest class of carriage horses in the world, and as the business is in its infancy there is no telling what its limit may be.

Mr. Creigton recently paid a visit to Governor Stanford's celebrated stock farm at Palo Alto, near San Francisco, Cal., and in giving an account of the visit says, the farm contains 537 head of horse stock, mostly all yearlings and two years, in addition to the most famous dams and sires that money could purchase. He mentions the fact that the whip is never used at Palo Alto on the horses, and that it is not only forbidden to strike an animal, but an angry word by any of the hands is followed by instant dismissal.

Mr. John Kerr, of Nelson, is now in the United States purchasing horses for New Zealand, and Mr. R. W. Cameron, who did so much toward promoting the success of the International Exhibition at Melbourne, has recently shipped to this colony some very valuable blooded stock. The truth is, American horses have been looking up ever since Foxhall and Iroquois captured the blue ribbons of the French and English turf.

THE AUCKLAND STUD COMPANY.

The success of the Auckland Stud Company and other similar undertakings in New Zealand, furnish abundant evidence as to what can be done in the way of systematic horse-breeding in this colony. In all these establishments the stallions and matrons are of the highest lineage. Many of them have been imported from England at a very heavy price, and especially those purchased by the Auckland Stud Company and by Mr. E. G. Stead, of Christchurch.

Among the horses recently imported from England by the latter gentleman, is the celebrated stallion Apremont, full brother to Chamant, the two thousand guinea winner at New Market, who was recently sold for $30,000. Apremont's pedigree shows that he is a descendent of some of the finest horses whose names are recorded in the English and French stud books. Mortimer, the sire of Apremont, was himself a great race horse, and was purchased last year for the American turf. Araucana, the dam of Apremont, is by the Touchstone horse Ambrose, from Pocahontas, dam of the Emperor of Hattin's Stockwell.

Three years ago the Auckland Stud Company had only one stallion and two or three mares. It is now the leading stud company in Australasia. Indeed, none of the others can be compared to it, either in regard to the number and character of the stock, or as to the skill and ability with which it is managed. Among the thoroughbred horses belonging to the Auckland Stud Company are the celebrated stallions, Musket, Cap-a-pie, Anteros, and Sterlingworth. These horses will compare favorably with the most famous horses in Europe and America, and are absolutely unsurpassed for beauty and quality, substance and correct breeding, on this side of the hemisphere.

Every one of these horses has an interesting history. Musket, the chief horse of the company, was purchased in England at the break up of the late Mr. F. Payne's stud. He is about 16.2 hands in height, and his color is of a bright brown. He is compactly and symmetrically built. His head is unusually small but well shaped and blood like, and is set proudly on a good, muscular neck. His shoulders are oblique and very strong, and his propelling power behind is excellent. From the hock he is admirably let down. His temperament and staying properties have seldom been equaled. His splendid staying properties appear to have been transmitted to all his progeny.

The Hon. James White, of New South Wales, paid 1,250 guineas ($6,250) for a seven months old colt (Martini Henri), by Musket, out of Sylvia. This, I believe, is the highest price ever paid for a colt of that age in the Australasian colonies. Musket is by the same sire as Stray-shot—dam of Shotover, winner of the English Derby.

The following is the extended pedigree of Musket:

PEDIGREE OF MUSKET.

Musket.	Toxophilite.	Longbow.	Ithuriel	Touchstone	Camel.
					Banter.
				Verbeana	Velocipede.
					Rosalba.
		Legerdemain.	Miss Bowe	Catton	Golumpus.
					Lucy Gray.
				Tranby's dam	Orville.
					Miss Grimstone.
			Pantaloon	Castrel	Buzzard.
					Dau. of Alexander.
				Idalia	Peruvian.
					Musidora.
			Decoy	Filho da Puta	Haphazard.
					Mrs. Barnet.
				Finesse	Peruvian.
					Violante.
	Daughter of—	West Australian.	Melbourne	Humphrey Clinker	Comus.
					Clinkerina.
				Morpeth's dam	Cervantes.
					Dau. of Golumpus.
			Mowerina, sis. to Cotherstone	Touchstone	Camel.
					Banter.
				Emma	Whisker.
					Gibside Fairy.
		Brown Bess.	Camel	Whalebone	Waxy.
					Penelope.
				Daughter of	Sellm.
					Maiden.
			Daughter of	Brutandorf	Blacklock.
					Mandane.
				Mrs. Cruickshank	Welbeck.
					Tramp's dam.

West Australian, named in the above pedigree, won the Ascot cup at the great race in 1854, and made 2½ miles in 4 minutes and 27 seconds.

Next to Musket, Cap-a-pie is, I think, the greatest favorite of the stud company's horses. Cap-a-pie was bred in New South Wales, by Mr. A. Town, and was purchased by the company for the sum of 1,000 guineas ($5,000), and has proved himself to be an excellent horse. He is by Maribyrnong out of Miss Magus, and while on the turf beat Chester, the best horse of the year at weight for age. His color is of a beautiful bright brown.

Anteros ranks next to Cap-a-pie, and is a great favorite here. He is by Corteror out of Adrasta, and was imported from England about 6 years ago, by the late Mr. Malloch of Christchurch, but at the break-up of that gentleman's stud was purchased by the company for 400 guineas ($2,000). He stands about 15.2 and is a bright chestnut color. His progeny are at present running very well, and now that the company has secured such highly-bred mares to mate with him, his colts will command a much higher price than heretofore.

Sterlingworth, by Sterling out of Chillianwallah, was recently imported from England at a cost of 600 guineas ($3,000). Sterlingworth's breeding is of a very high order, and his services will doubtless be largely availed of.

DRAUGHT HORSES.

The Auckland Stud Company also pays much attention to the improvement of the breed of draught horses. Amongst those purchased for this purpose, Roseberry is perhaps the greatest treasure. Indeed, it would be difficult to find in any part of the world a finer horse of this kind, or one of grander quarters. He carries his head and crest proudly. He is of a bright bay color, and is prettily marked with a star in the forehead. I learn from my friend, Mr. Archibald Bruce, of the "New Zealand Herald," to whom I am indebted for much of the material of this report, that Roseberry is by Drew's celebrated Prince of Wales, out of Ruby, a well-known prize-taker, among whose winnings are included first prizes at Lancashire show, two years in succession, in the blood mare class, and also a first prize at the East Kilbride show, in a competition open to the whole of Scotland.

Roseberry was foaled in May, 1876, was first shown at Dumbarton County show when two years old, and was awarded first prize; also at Kilbride show, first prize, open to Scotland. First prize at Johnstone show, open to Scotland. In 1879, when three years old, Roseberry gained a £100 ($500) premium for the West Lothian Society, and the same year he gained first prize for best three-year-old entire colt at the Highland and Agricultural Society's show, at Perth, and also stood second for the champion cup, being beaten by his brother, Luck's All, who was first for aged stallions at Perth in 1879, and also got the cup. In 1880, Roseberry was third at the Highland and Agricultural Society's show, at Kelso, serving mares at £10 10*s*. at Black Hall farm, where he made a very successful season. In the spring of 1881, Roseberry gained the Duke of Argyle's premium of £150 ($750), and to serve mares for the Duke's tenantry in Kentrye. There are several other very fine draught stallions belonging to the company, and well known throughout the colonies, Elgin being amongst them.

CLYDESDALE MARES.

The company's Clydesdale mares are equally worthy of attention, and especially Emma and Lillie. Emma was four years old in May last, and was bred by Mr. David Riddell, Black Hall, Paisley; sire, Darnely, dam by Young Campsie. Emma is a bright bay, white stripes on face, near hind foot white. She gained first prize at Renfrew County show when one year old, and was also awarded gold medal as best mare of any age at the show; first prize at Johnstone open show; and when two years old, she gained first prize for Dumbarton County show; first prize for Paisley; first prize for Johnstone open show; third prize at the Highland show at Perth; and when thsee years old, she gained first prize at Maryhill open show; first prize at Glasgow; first prize at Kirkentilloch; first prize at Johnstone; first prize at Kilbride; first prize at Paisley, also the cup; and first prize at Royal show at Carlisle; first prize at Preston Jeans, beating Queen Mary; and when four years old, she gained first prize at Maryhill open show; first prize at Lanarkshire; first prize and cup at Dumbarton; first prize and cup at Johnstone, and second prize at Highland show, at Sterling.

Lillie is three years old, and was bred by Mr. D. McFarlane, of Bishop-

briggs, Glasgow; sire, Darnley, dam by Kerr's Conquerer. Lillie is rich dark brown, with small star on face, and near hind foot white. She has been exhibited only at the Bishopbriggs, Cadder and Barony, and Glasgow Society, held at Lenzie, and was awarded first prize, beating mares of all ages in 1881, and third at Johnstone open show, when competing with mares of all ages.

THOROUGHBRED MARES.

The company is very proud of their thoroughbred mares. The following were recently imported from England at very high figures: Atlantis, by Thormanby out of Hurricane; Rosette, by Lord Lyon out of Rouge Rose; (Rouge Rose, by Thormanby, is a sister of Ben d'Or, who won the Derby in 1880); Madcap, by Trumpeter out of Maid of Masham; Bergerere, by Saunterer out of Lass O'Gorvie; Clytemnestra, by Blair Athol, dam by Birdcatcher; Mersey, by Knowsley-Clemence; Sister Agnes, by Rosicrucian out of Nameless.

The company also owns several highly bred Colonial mares, including Sylvia, Raupo, Onyx, Nightshade, Moonbeam, Moonlight, and others, all in healthy breeding condition.

The affairs of the company have been splendidly managed. The board of directors have exercised great care and judgment in selecting only the best stock for breeding purposes.

The following sales were made by the company last year:

Grundale	$3,550 00
Penrose	300 00
Martini Henri	6,250 00
Knothingdy	750 00
Hancock	300 00
Graham No. 1	350 00
Maggie	310 00
Nancy	200 00
Prince Arthur	200 00
Champion colt	232 50
Champion colt No. 2	200 00
Graham No. 1, filly	100 00
Beanstalk	600 00
Moonstone	750 00
Acrotite	750 00
Farmer	200 00
Graham No. 2	225 00
Prince Arthur, colt	250 00
Polly	225 00
Rosey	200 00
Furgus Duke	375 00
Maggie, filly	100 00
Prince Arthur	1,000 00

The company has recently purchased the fine estate of Sylvia Park, near Auckland. It is situated on the Great South Road, about eight miles from Auckland, and stretches back to the Tamaki River, containing 620 acres of the most fertile land in the province, dry and volcanic, and laid down in grass.

The new stables, which are approaching completion, have a frontage of 130 feet, with a depth of 72 feet, forming a quadrangle, and divided into a series of loose boxes to suit the different classes of stock. Some of the boxes will be 20 by 12 feet, but most of them 14 by 12 feet, and numbering fourteen in all. At the rear of the extreme wings are the fodder rooms, which are easily accessible, and in case of fire readily shut off. In the center of the quadrangle is a large harness-room. Behind the

boxes is an interior covered passage 6 feet in width, in order to give ready access to and easy supervision of the stock. There is a quadrangle in front, surrounded by a veranda 9 feet wide, so as to enable visitors to inspect the stock without going into the boxes. The doors of these boxes slide on wheeled gear, and are thus easily opened and shut. On the opposite side, facing the quadrangle, are also doors, so as to give extra means of exit for the stock in case of fire. Water is laid on throughout the building, and hose laid down at intervals, ready for instant use. The water is supplied from an independent tank, containing 20,000 gallons. Off the passage to the harness-room are stairs leading to the sleeping and sitting rooms of the groom in charge. From his apartments there is a staircase to the roof, which leads to the "lookout" station constructed there, and which is a feature in the architectural appearance of the buildings, and from which a bird's-eye view can be had of the whole station.

A fine residence, in Gothic style, containing nine rooms, with every convenience, is being erected near by for Major Walmsey, the manager. This dwelling will be very tastefully furnished, and especially the visitors' room and that intended for the major's large and valuable stud library.

G. W. GRIFFIN,
Consul.

UNITED STATES CONSULATE,
Auckland, N. Z., June 15, 1882.

NEW DOCK AT GRANGEMOUTH.

REPORT BY CONSUL LEONARD, OF LEITH, SCOTLAND.

In illustration of the continued increase of dock accommodation provided for the shipping in ports within this consular district, I respectfully take occasion to report that a new dock and timber basin at Grangemouth were opened on the 3d June, 1882.

Grangemouth is a small but flourishing seaport on the southern shore of the Firth of Forth, a short distance from Bo'ness (whose new dock I reported upon in December last), and is about 20 miles higher up the firth than Leith.

Grangemouth is the entrance to the canal which connects the Firth of Forth with the Firth of Clyde, and is, therefore, the nearest port on the east port of Scotland to Glasgow.

The Carron Company, whose extensive iron-works are situated in the neighborhood, attracted, after the year 1760, a maritime trade, and the subsequent formation of the Forth and Clyde Canal, in 1767 (which was completed in 1790), resulted in the foundation of Grangemouth as a port which speedily rose into notice, and from nearly the time of its creation it has been the emporium of the commerce of Stirlingshire and the adjacent country.

At Grangemouth the Carron Company have a spacious wharf, and they conduct a large trade in iron. The Stirling merchants unload their cargoes there, floating their timber from up the Forth to Stirling and transporting their iron by land. It has also an extensive trade in coal.

Timber, flax, tallow, lumber, and iron from the Baltic, and grain from foreign countries and from the east coast of Scotland and England, are

landed on its quay. Rope-making and ship-building employ a number of hands. The construction of steam vessels is also carried on, and there are several other important industries.

Grangemouth is in the very center of the Caledonian Railway system, and not far from the center of the equally comprehensive system of the North British Railway. Previous to 1810 it was treated as only a part of the port of Bo'ness, but since that time it has had a custom-house of its own.

In the year 1867 the canal and the old docks passed into the ownership of the Caledonian Railway Company, and in 1877 that company, having experienced the inconvenience and hinderance to trade caused by the limited accommodation for vessels which was afforded by the harbor, commenced the construction of the new dock, which has now been finished at a cost of about £300,000 ($1,459,950).

The ground reclaimed amounts to nearly 60 acres, and the space covby the new dock itself extends to about 19½ acres, which, added to the old docks, gives about 28 acres, including timber basins available for bathing purposes, while, if required, a large portion of the basins can be prepared for vessels. A number of railway lines for the conveyance of different kinds of freights surround the docks, and on the north side, that facing the Forth, a row of loading sheds, 1,200 feet in length, will be erected for general shipping traffic.

The sea-lock, which is the entrance to the dock, measures 350 feet within meters, and has a depth, like the entire mid-channel, of 26 feet. Outside the dock-gates there is a wall 850 feet long, where ships can wait or discharge if necessary.

The coal-loading berths have been placed at the side of the dock, where a number of hydraulic hoists are to be erected. Two of them are already in operation, and appear to be specially well adapted to the work for which they are intended.

It is calculated that these hoists will each load 900 tons per day, or 85 eight-ton wagons. In addition to the hoists there are a number of portable cranes for unloading vessels with pig-iron, lumber, and lighter goods, with a reach of 33 feet and a lifting capacity of 35 hundredweight.

As further showing the progress made by Grangemouth within a few years, I may state that the number of its population had risen from 2,571 in the year 1871 to 4,424 in 1881; also, the number of vessels which arrived there in the year 1867 was 1,639. The registered tonnage of these vessels was 266,694, and the total tonnage of cargo brought in and taken out during the year 1869 was 464,100, while in 1880 the number of vessels which arrived was 1,725, the registered tonnage being 431,006, and the total tonnage of cargoes 794,832. In these thirteen years the increase in the number of vessels was only 5 per cent., but the increase in the registered tonnage of these vessels was no less than 60 per cent., and the increased tonnage of cargoes was 75 per cent.

The Caledonian Railway Company will shortly increase the present facilities in connection with the docks by constructing a new line which will complete the central railway system. There is every probability, therefore, that Grangemouth, with such advantage by railway and so great increase of harborage, will make even greater progress in trade than it has done for many years past.

J. A. LEONARD,
Consul.

UNITED STATES CONSULATE,
Leith, June 15, 1882.

THE PRUNE TRADE OF BORDEAUX.

REPORT BY CONSUL ROOSEVELT.

Perhaps the greatest favorite among the foreign dried fruits sent into the United States is the French prune. The raisin, the date, and the Turkish prune hold their places in the market, but the delicious *prune d'ente* is very properly the most popular with Americans, who are said to be the only people who know how to cook them.

The greater part of the fine prunes that are raised for exportation, are produced in the department of Lot-et-Garonne, in orchards of especially-grafted plums, which cover an area of about 500,000 acres. These orchards are the property of peasant farmers, and the acreage is constantly on the increase, owing to the failure of the vineyards, which are being replaced in the prune region by the more hardy plum tree.

Prune trees are generally planted about 20 feet apart, with other crops growing between them. The trees are usually healthy, but in some seasons require great care to protect them from small caterpillars.

The orchards being small and the peasants numerous, these marauders are usually dispatched in detail. Prunes grown near the river Lot are of a very dark violet color, and are possessed of a very delicious flavor, and this is the variety which is packed with so much care in fancy boxes for the confectionery trade.

The peasants begin to pick the prunes after the middle of August, and remove them from the trees only when they are dead ripe. Then they dry them in Dutch ovens, which are heated to a given temperature by a fire inside the oven; the fire is then taken out and the prunes placed in the oven on trays. The peasants do this drying so imperfectly that exporters are often compelled to put the prunes through a further process before they are fit for exportation, for, as the value of the prune largely depends upon its size after drying, the peasants stint that process to preserve the bulk. When properly cured they are cooked through, and the secret is to accomplish this desirable feat and still maintain the size and color of the prune.

The crop varies greatly with different years, but the maximum was probably reached in 1875, when 10,000,000 pounds were produced. A great quantity of prunes is consumed in France, and there are, of course, many varieties which come very much cheaper than the prices shown by the following table. The more ordinary varieties are not, however, exported to the United States, though they are sent in considerable quantities to England, Canada, and Germany. The reason why they are not sent into the United States is very apparent when it is considered that the duty on first-class prunes is 1 cent per pound, while that on the ordinary ones, called "plums," is 2½ cents per pound. In the English markets the large ones are called plums and the small ones prunes:

Market prices per 100 pounds from 1876 to 1881, inclusive.

	Minimum.	Maximum.	Average.
Prunes per pound:	*Francs.*	*Francs.*	*Francs.*
50 to 55	62	132	90
60 to 65	54	104	70
70 to 75	47	90	58
80 to 85	37	79	50
90 to 95	27	69	42
100 to 105	21	62	36

These averages are calculated upon six years ending with 1881, and they represent the net cost of the fruit as bought from the producers on the country markets as nearly as it is possible to ascertain them. It will be observed from the above table that the value of the fruit is in proportion to the size, or, which is the same thing, the number required to make a pound, the largest ones always fetching the highest price. The men, women, and children employed in the packing and curing receive from 10 to 80 cents per day and board themselves, and they work from 6 a. m. to 7 p. m. The total value of the prunes shipped from this port to the United States in 1880 was $136,514.90, and in 1881 $362,225.92, showing an increase of $220,711.02.

GEORGE W. ROOSEVELT,
Consul.

UNITED STATES CONSULATE,
Bordeaux, June 6, 1882.

SILK-WORM CULTIVATION.

REPORT BY VICE-CONSUL GRIFFITT, OF SMYRNA.

The efforts that are being made at present in the United States to extend the culture of the silk-worm leads me to make this report, trusting it may be useful.

I have been engaged for many years in raising silk-worms, my object being the study of their diseases, and, after years of experiments, have succeeded in obtaining healthy grain, the *basis* of *success in silk culture.*

I was induced to make these trials in the hope of alleviating the losses that the peasants in Turkey have suffered for the last twenty-five years, and have endeavored to interest the governors of this Vilayet in my work, in order that I might obtain the moral support of the government, but thus far without success.

The loss suffered by Turkey since 1857, when the silk-worm disease first spread so violently, is incalculable. I remember the time when the wife of every gardener in the vicinity of Smyrna obtained from her crop of cocoons a sufficient return to enable her to pay for the clothing of her family for the entire year. This fatal disease swept away our beautiful indigenous races, and this branch of industry was almost abandoned. Many mulberry trees were uprooted, those that were retained being kept by the gardeners solely for the use of their branches.

There were at that time three large silk-reeling factories, worked by steam, where hundreds of women were employed. Work had to be abandoned for want of cocoons. The Japanese race was introduced later on, with but partial success. There is a very great difference between the indigenous and the Japanese races; it requires at least double the number of the latter to give the same weight in cocoons; that is to say, if it requires 250 fresh cocoons of the indigenous race to weigh a pound, it requires 500 of the Japanese, and the quality of the silk is much inferior.

I obtained some years ago a quantity of indigenous grain of a very fine race, but very much diseased. I raised the worms from the moment they were hatched in separate cells, in order that the diseased ones might not infect the healthy (all the worms of a diseased moth are not diseased), and from the few healthy ones I obtained my present race, which I have since then continued to improve, and I now find it in every way

superior to all other races I have raised, not only as to the vigor of the worm, but also as to the weight of the cocoon and the quality and quantity of the silk it yields. From one ounce of 30 grams I obtain invariably from 150 to 155 pounds of fresh cocoons, 12 pounds of which, just taken from the brushes, yield over one pound of silk of the best and finest quality. Another great advantage of my race is that it has not more than 4 to 6 per cent. of double cocoons, while other races have from 15 to 30 per cent.

In my experiments in raising grain I find that double cocoons should never be used for reproduction. On the contrary, they should be carefully avoided, as the worms obtained from grain the moths of which issued from double cocoons have a tendency to form double cocoons the next season.

All the grain I raise is manufactured on the system of the distinguished Pasteur, to whom sericulture owes everything in the regeneration of the silk-worm. Each moth is placed on a small cloth to lay its eggs, and when finished laying it is pinned by its wings to the cloth, to prevent it from falling off. It is afterwards examined with a microscope of a magnifying power of 500 diameters, and when found diseased, which can easily be ascertained by the appearance of corpuscles on the disk, the grain is thrown away. In this way I am certain that my grain is free of one of the principal diseases of the silk-worm, the one that makes the greatest havoc, called "pebrine." The corpuscles are easily distinguished; they are of a brilliant oval shape.

The other great disease, known by the name "flacherie," can easily be ascertained without the aid of the microscope by watching the worms in their last age. If there are few deaths at that period, and if the worms do not hesitate in mounting the brushes to spin their cocoons, it is safe to consider them free from that dread disease which carries them off in their last age, just when the educator counts upon the probable reward for labor and outlay. The grain, when examined, is washed off the cloth after the lapse of a month from the time of laying. The washing process is as follows: A sufficient quantity of soft water is boiled over night, and there is then added thereto 10 per cent. of alcohol. The grain is washed off in this water, and then exposed to the air in a shady place, to dry as rapidly as possible. When thoroughly dry, say in two or three days, the grain should be placed in a box of perforated zinc, containing drawers of the same material, each layer of the grain not to exceed a centimeter in thickness. The box containing the grain is hung from the ceiling in a dry, airy locality, and kept there till the next season. The cold of winter need not be feared; it is, on the contrary, very beneficial to the grain.

In March I have my nursery whitewashed and thoroughly cleaned, and all the utensils exposed to a fumigation of sulphur. Toward the end of March the mulberry tree, in this climate, begins to bud, and when the leaf attains the size of about a silver dollar I place my grain in thin layers in a room heated with an earthenware stove and gradually bring the temperature to 70° Fahrenheit, taking care to keep a vase of water constantly on the stove. The grain begins to hatch in six or seven days, and continues to do so for four or five days. I throw away the last day's issue, as the worms are not numerous, and weak, although not sickly. Each day's issue is kept apart; to the first day's issue I give two feeds of leaf, cut up very thin with a clean knife, and I give an extra feed to each day's after-issue. The first day's issue I place on the lowest frame of the stand, those of the second day on the one above, and so on. The object of this is to enable the worms of the last day's issue to reach the

others in their first molt, as the higher the worms are placed on the stand the greater is the heat, and this, joined to the extra meals, enables them to make their first molt with those hatched earlier, thus forming a regularity in the education. In the second, third, and fourth ages I feed my worms four times a day, at 5 and 10 a. m., and at 3 and 8 p. m. The feeds are given with great regularity. In the last age they are fed constantly from 5 a. m. to 11 p. m., and when I raise worms in my large nursery I employ extra hands to continue feeding them during the whole night, not in large quantities, but never allowing them to remain without food. It is indispensably requisite that the worms should not be crowded, especially in their first ages. I give to the worms of one ounce of grain, in their first age, a space of 2½ square yards; in their second age, 5 square yards; in their third, 10 square yards; in their fourth age, 25 square yards, and in their fifth and last age there should not be more than 500 or 600 worms per square yard. The leaves of the wild mulberry are preferable for the first three ages, and the leaves of the grafted mulberry should be given for the fourth and fifth ages. The leaves should be gathered after the dew has evaporated, and if wet by rain they should be dried before they are given to the worms. The leaf is cut up to the end of the third age; after that the leaves are given entire to the worms.

I clean my frames twice during the second, third, and fourth ages. Once immediately after their first meal, after their molt, and again the day before they begin to molt. This is done by placing sheets of thick paper, pierced with holes sufficiently large to allow the worms to pass through. These pierced sheets of paper are placed on the worms, leaves are placed on them, and in a few moments the entire batch will crawl upon the leaf. The papers with the worms on are then raised and placed upon a clean frame; if a few should remain in the litter I put them apart from the others. The litter should be raised very carefully; no dust from it should be allowed to spread in the room.

The last age of the worm is certainly its most critical one, and requires the greatest care. At this period the worm eats twice as much as during its first four ages, and the litter remaining on the frames, together with the dejections of the worms, renders the air impure and unhealthy. Consequently the frames should be cleaned frequently, and there should be a constant renewal of fresh air. Diluted chloride of lime should be kept in each corner of the room during the entire period of the fourth and fifth ages.

Five days after the worms have formed their cocoons they should be taken off the brushes with great care, for if any diseased worms remain on the brushes in a state of putrefaction the good cocoons would be soiled and consequently depreciated in value. All imperfect cocoons should be separated and exposed to the sun for some days, to destroy the chrysalide; the good ones steamed. The steaming process for destroying chrysalide is far preferable to any other; the silk is not injured thereby, as it is apt to be by baking or exposure to the sun. I steam them for twenty minutes, the water constantly boiling, and this I find sufficient to destroy the chrysalide; I then place them on the frames in thin layers to dry, and after this is effected the cocoons should be reeled off as soon as possible.

By raising the worms of healthy grain, such as I have above described, and by following the foregoing directions, it is impossible not to succeed in obtaining a good crop of cocoons. Years' experience has proved to me that, ignorant as some of the educators have been to whom I have given

grain, they have invariably obtained a remunerative crop of cocoons, and even sometimes quite as good as my own.

In December next, the proper time for shipping, I will send some ounces of my grain, together with a sample of my reeled silk, to the Department of State.

JOHN GRIFFITT,
Vice and Acting Consul.

UNITED STATES CONSULATE,
Smyrna, July 5, 1882.

THE FRENCH COCOON CROP.

REPORT BY CONSUL PEIXOTTO, OF LYONS.

The French crop of cocoons for this year is nearly all disposed of to the various people who buy them from the growers, and the result of the season's work, so far as the general success of the raisers is concerned, is beginning to be known. Definite figures as to the actual amount of the crop will not be obtainable for some weeks yet.

I have taken measures, of course, to keep myself informed, and am happy to be able to report that, the general result being known, it is found to include some facts which are of very great importance. To understand the bearing and importance of these facts it is necessary to refer back to the history of sericulture in France for the past ten or twelve years, especially to note the following facts connected with it: For many years previous to about 1872 the raising and reeling of silk constituted an industry which prospered and grew yearly in Southern France, and which became one of the greatest and most important sources of the wealth of that very rich country. Finer cocoons, on the average, were there produced than in any other place. The local circumstances favored economical production. The market was close at hand. The excellence of the reeling which skilled labor performed enabled reelers to sell at high prices the silks which they produced, and, consequently, to pay well for cocoons. There was plenty of demand for all the product of the filatures. In a word, sericulture was an extremely lucrative pursuit, and everything seemed to favor it in the district.

Originally, and for a long time after the introduction of the industry into France, both rearing the worms and reeling of the silk were domestic operations.

The peasant women, who raised the crop at home in the springtime, reeled it into silk during the summer and autumn, and sold the product of their labors in the form of "grège" or raw silk. Afterwards factories for reeling (filatures) were set up, and these, by reason of the economy resulting from system, prove the advantage of working on a large scale, and with organized and specialized labor soon made it more profitable for the growers to sell their cocoons than to reel them. This became the habit and the two branches of the industry became separated. Reelers almost invariably bought their cocoons, and the raiser almost invariably sold them. A decided gain in the quality of the product and an important economy of labor resulted from this change of system, and both aided and fostered the industry, so that, as has been said, it became very important and flourishing, and was in most excellent condition up to about ten or twelve years ago.

Subsequent events show, however, that at this time there were many circumstances which were becoming unfavorable to the silk growing

and reeling interests of France. The war with Germany and the heavy taxation following it increased the cost of living and made wages higher.

Japan changed her traditional policy and entered into a rivalry with civilized countries in the markets of the world, especially as a seller of raw silk, in the reeling of which much progress was made in that country by means of the introduction of European systems and apparatus.

Commercial intercourse with oriental nations had become much better organized than in olden times, and was vastly facilitated by the introduction of the submarine telegraphs. Chemical discoveries applied to the dyeing of silk and improved machinery for finishing woven goods combined to enable the manufacturer to produce articles of fair appearance from inferior material; fashions changed and allowed the designers of Lyons to sell goods made from eastern silks in figured patterns instead of the plainer but more solid fabrics which had formerly been in favor; and Italian reelers, pressed by a sharper necessity, built new filatures which were better and which worked more economically than those possessed by the French.

From these things it resulted that it became more and more difficult and expensive to reel in France; that more eastern silk was imported and used in competition with that of Europe, thus lessening the demand for the latter, and that the rivalry of Italy became more difficult to cope with than before.

These drawbacks could, in all probability, have been easily borne by the French reelers had nothing worse happened; but they were on the eve of what proved a great disaster to them and to all France, the disease which broke out among the silk-worms. These diseases were undoubtedly due in large measure to lack of care and the effort on the part of growers to do too much. Instead of raising but the small quantity of cocoons which could be reeled at home, each peasant endeavored to make as large a crop as possible to sell to the reelers. Overcrowding, lack of ventilation, poor care, &c., naturally resulted in enfeebling the insects from generation to generation, until as a race the European silk-worm became unable to withstand the disease which soon attacked it.

Whatever the cause or reason may have been, a parasitic disease became epidemic; it swept away the worms by millions, and in many cases reduced the annual crops of whole districts to little more than one-third of what they should have been, and even the small results obtained were directly due to eggs imported from Japan of an inferior race, and obtained with not a little difficulty and at great expense. Sericulture became uncertain and generally unprofitable.

Mulberry trees no longer yielded the harvests of olden times, none were planted to replace those which died, and tens of thousands were rooted up for firewood.

Reelers naturally suffered with those who had supplied their raw material. They were driven in many cases to close their establishments, which had since fallen into decay, and those who continued only did so at the cost of very heavy sacrifices. They were forced to pay higher prices than they could afford, and import their cocoons a great part of the time. This state of affairs continued year after year. The "*maladie des vers à soie*" has cost France hundreds of millions of dollars, and at one time threatened to exterminate what had once been one of the most important industries of the country. Generally, the reelers went from bad to worse, until for some years past they had, as a very general rule, only been able to keep going by advances from their customers and commission merchants, into whose power want of money obliged them to put themselves.

In 1876 there was a great speculation in raw silk. As a result, many who had been in the habit of advancing money to reelers were ruined, and many others received such treatment as gave them a great distaste for the article, so that they would have nothing more to do with it. This was another disaster for the reelers. Many of them lost directly by the speculation, and they were all most unfavorably affected by the fact that their customers became fewer, and the power against them of the money-lenders was concentrated into fewer hands, trade rivalries, which had been to their benefit, being done away with. At length matters became so bad it was thought that, unless artificially encouraged, French sericulture would have to succumb, and a strong demand was made on its behalf for a protective duty on raw silk. Naturally, this was fiercely opposed by Lyons, whose interests are with the exporters and manufacturers, both entirely distinct classes from the reelers.

The conflict of policy and interests to which this question has led has been followed up with considerable effort and a good deal of feeling on both sides. The reelers being in bad condition, as has been shown, and much in the power of their adversaries, have gained nothing by the agitation, and I am inclined to think that in some cases it has worked to their positive injury. The difficult position into which reelers were forced of course became known, and, as a result, it has become harder and harder for them to obtain the credit which, year by year, has become more and more important to them.

Meantime the cost of living has been continually advancing in France, and women possessed of the address and of the steadiness and industry indispensable in a good *fileuse* have had opened to them many new employments and many more chances of gaining money than in old times. On these accounts workwomen have become scarce, and for some years back it has been nearly impossible for the owners of filatures to obtain even the amount of labor necessary for the diminished amount of their production.

Some two years ago it seemed as if scarcely anything was wanting to complete the ruin of the French reelers, and they were thoroughly discouraged and disheartened. At this very time, however, it began to be understood by the more far-seeing among them that there were rifts to the storm-clouds and they have held on desperately from season to season, expecting better times to come. I have thus rapidly sketched the crisis to which the industry has been subjected, in order that the reasons for its existence may be realized and the future outlook considered.

During the height of the disease (*maladie*) Mr. Pasteur undertook to study its causes, and, if possible, to find some way of subduing it. He was successful. He invented a method for the examination of the moths which made it possible to preserve sound eggs only, and to detect and destroy those infected with the disease. For a time but little attention was given to his work, but by degrees his method came into use, and it may be said to have been thoroughly tried on the crop of France for the first time last year (1880–'81). The result was that there were not leaves enough to feed the healthy worms which grew. The disease was vanquished, but for the moment the very magnitude of the victory achieved served to obscure its importance in the eyes of the world. The crop was not a brilliant success, owing, not as usual, to disease, but to lack of food, and people had become too accustomed to trouble to wish to analyze it any more; so that the deductions to be drawn from last year's work were very largely looked upon with indifference, and no excitement was caused except in the minds of a few "enthusiasts."

This year the prudent peasants put only a few eggs to hatch; they feared disaster, and the chosen eggs were dear. But those hatched have more than confirmed last year's experience. The disease is practically a thing of the past. There were this time plenty of leaves, and the crops raised in proportion to the eggs hatched are all that could be desired or expected in the good old times before "pebrine" and "flachrie" were heard of. The good climate of the Midi has again had a chance to do its part, and France is this year an exporter of cocoons.

The success of the Pasteur method is now universally admitted, and the most careful and conservative now give full adhesion to it, and make their calculation for the future accordingly.

Among the most prominent points in these calculations there is one which is of great importance, namely, that to reel the crops of France in the immediate future the filatures must be increased about 30 per cent. If this increase is not made, France must export cocoons. Now the exportation of cocoons from this country is for many reasons so wasteful that it is not contemplated as practicable or likely, except in extraordinary seasons, and all experts agree in thinking that the filatures must be augmented. This it is very easy to do, so far as the mere plant is concerned, but the skilled labor which would be required to run these new establishments cannot be had. Even if women were willing to work for the old wages (which they are not), it would take years to train them.

The necessity for automatic machinery is, therefore, suddenly thrust into prominence, and it has become of the utmost interest to supply it. There are many other indications in favor of this fact. Power looms are increasing in numbers and importance with great rapidity, and require well-reeled silk for this use. The changing of silk, which began by giving a good appearance to an uneven thread, has now so far developed as to require a good thread to carry the mass of foreign material which is attached to it. And the fashions have again set toward solid fabrics. All these things are immensely in favor of automatic machinery, without the use of which French and Italian sericulture will become a thing of the past.

For the United States, even more than for Europe, automatic machinery is an absolute necessity; the only means, in fact, of making sericulture practicable and of firmly planting this industry among the sources of domestic and national wealth. It is for this reason I have had the honor of submitting the foregoing report.

B. F. PEIXOTTO,
Consul.

UNITED STATES CONSULATE,
Lyons, July 5, 1882.

COMMERCE AND NAVIGATION OF VENICE.

REPORT BY VICE-CONSUL BUDD.

The total number of ships engaged in the foreign and coasting trade entered at the port of Venice in the year 1801 was 2,559, with a total tonnage of 684,927 tons, manned by 36,645 men, against 2,690 vessels, with a tonnage of 605,824, and manned by 33,794 men in 1880. This shows an increase of 79,100 tons as compared with the tonnage of 1880:

		Tonnage.
718	Austrian	122,203
268	English	296,511
3	French	1,012
49	Greek	12,282
7	German	2,505
2	Danish	390
10	Montenegro	327
2	Dutch	265
5	Turkish	234
2	Russian	422
15	Swede and Norwegian	7,673
1	Belgian	1,344
1,477	Italian	293,759

It is with great satisfaction that I can say that the imports have been ascertained to amount to $48,147,294 during 1881, whilst in 1880 they amount only to $43,648,212, showing an increase of $4,499,082. Of these imports the chief articles were grain, wines and spirits, hemp, woven goods, metals, raw and manufactured, timber, tobacco, comestibles, medicines, fruits, tallow, hides, wax, cotton, wool, and petroleum.

In referring to the subject of exports, a slight decrease ($706,356,) can be observed. In 1880 the total exports amounted to $37,243,013, and in 1881 to $36,536,657; they consisted principally of tallow, cheese, glassware, wax, oil, matches, grain, sulphur, hides, and cotton woven goods.

Exports to the United States consisted principally of the following articles:

Glass, crystal, beads, and mosaics	$28,639
Furniture, carvings, and antiquities	15,715
Sulphur	34,525
Hemp	26,862
Bronzes, artistic	2,841
Statuary, marble	1,546
Paintings	2,156
Whisk-straw	434
Photographs	440
Total	113,158

In 1880 the exports amounted to $56,236, and this, compared with the exports of 1881, shows an increase of $56,922. Trade between Venice and the United States has assumed larger proportions of late and is growing considerably in its development with each succeeding year.

In manufactures and industries there has been a decided revival throughout the entire country, and especially in Venice. On the small island of St. Helena a factory has been established for the manufacture of locomotives, railway cars, &c. This factory will employ some 1,500 workmen daily when in operation, and its construction is being pushed vigorously toward completion. A cotton mill has also been started in this city, to be completed in a year's time, and will have a capital of 10,000,000 francs. When complete it is meant to run 100,000 spindles, but will shortly commence operations with 25,000 spindles, and employing a daily force of 2,000 workmen. This mill will contain all the latest improvements in machinery, and will doubtless prove a great success.

In connection with the famous artistic glass factory at Murano there has been established an extension, with a capital of 600,000 francs, for the manufacture of ordinary window and table glass. This is a decided innovation, for heretofore the factory at Murano has been exclusively used for the manufacture of the famous Venetian artistic glass.

In addition to the foregoing, there have been established two foundries

for the manufacture of artistic bronze and brass articles of statuary and ornament.

W. H. DE WOLF BUDD,
Vice-Consul.

UNITED STATES CONSULATE
Venice, July 11, 1882.

SWISS vs. AMERICAN DAIRY THRIFT.

REPORT BY CONSUL BYERS, OF ZURICH.

For a hundred years Switzerland has been famous for the productions of its dairies. At the international cattle show of Paris in 1878 every Swiss cow exhibited bore away a prize. They competed, too, with exhibits from Holland, England, Denmark, and other famous cattle and milk producing districts of Europe, while recent statistics show that the famous short-horns of England have dangerous rivals in the "brown Schwytzer" race of milkers in Switzerland.

The report of this Paris cattle show and the earnest inquiries of certain American cattle-growers and dairymen led me to undertake as thorough an examination as I could of the causes leading to the acknowledged success of the milk industry of this country. Published statistics bearing on the dairy productions are meager, insufficient, and out of date, and agricultural journals in Switzerland are few and scarcely worthy of the name. On looking over the pamphlets, papers, &c., printed on the subject, all of which I collected, I felt that more practical information could be gained by personal and repeated visits to numerous dairies and cattle farms and learning from individuals the experience of those who make the milk industry the business of their lives. The result of these personal investigations I beg to submit to the department.

My first visits were among the dairies and farms of the canton of Zurich, then among those of canton Zoug, famous for its milk-condensing establishment at Cham, and canton Schwytz, recognized as the home of the best dairy cattle known to the country.

One of the first facts noticed, and, as it proved later, the most important fact, was the *underfeeding*, as an American would call it, of Swiss dairy cows. These fine milk and butter producing animals of Switzerland are fed only on grass and hay the year through. This is the general practice. There are a few exceptions, referred to later. High feeding and fancy feeds with cotton seeds and oil cakes, ensilage, boiled fodder, and all that sort of messing are but little known here, whether to the advantage of the Swiss dairy or not those interested may conclude as they read further. I only remark now that such articles of food for cattle are scarce and dear here, but it must not be supposed that the fact accounts wholly, or largely even, for their not being fed. The world is not yet settled in the belief that stuffing is any better or healthier in the end for the animals than it is for men and women.

The extreme warmth of the stables in almost every case was as noticeable as the simple quality of the feed. Swiss cattle stalls are almost universally long, very low, rectangular attachments to the barns. They are always built of stone, with walls 1 to 2 feet thick. The stalls are usually ceiled overhead, and are often plastered throughout. The floors are likely to be stone or cement, and the single oak door at the end of the rectangle is as tight-fitting and airless as the doors of the people's houses. There are no windows, unless the one or two little

barred holes through the stone walls are to be called windows. There is no ventilation, and the place is very nearly dark. The hay is gotten into the little low mangers through small openings in the wall between the heads of the cows and the hay barn. The atmosphere in these stalls is hot and horridly impure. The universal reason given for penning the cows up in these low, dark boxes is, "It saves feed;" also that "The *cows give more milk* for the great warmth," and, "There are no flies there to worry them to death." There is a modicum of sense in it all. Some feed is doubtless saved, and the nuisance of the flies is certainly done for. Ordinarily, the cows remain in these hot pens summer and winter, all their lives, except the few moments each day when they are led out to water. The stalls are clean and nice beyond comparison. They are swept and littered two or three times a day. It is their heat only and want of ventilation that are nearly unendurable. The litter or bedding is usually slough-grass, poor hay and straw, and sometimes sawdust. Cows that are kept by peasants in the neighborhood of the mountains are taken out and pastured on the high Alps during the short summer. This, however, is a comfort denied all Swiss cattle of the plains and cattle near to towns. In the stalls the cows stand in rows, with scarcely a foot of room between them; indeed, they have barely room to lie down at all.

As I have already said, grass and hay form, usually, the only feed the cows receive. In the summer the cow is fed all the fresh-cut grass she will eat. In the winter she is allowed, usually, about 7 Swiss clafters of hay, a clafter measuring 216 cubic feet. This would average near to 30 pounds, or, at selling prices, about 19 cents' worth of hay to the cow daily. In exceptional cases only are 2 or 3 cents' worth of turnips, potatoes, or shorts are added to this daily ration. There are no pasture-fields aside from the high Alps, so the cow receives her grass ready cut and in her manger, out of reach of flies. The belief I found to be general that while high feeding of vegetables, artificial food, &c., may and does increase the *quantity* of milk, the *quality* is reduced thereby.

"Is Swiss grass, then, better than American grass?" I inquired of a cattle owner who had had experience in our country as well his own. "Very little," was his answer, "except that it is not so much subject to drought, and it is better fertilized and better cared for." "If Americans," he continued, "would turn their attention less to fancy feeding and more to draining, fertilizing, and improvement of meadows, they would have more and better milk."

A moist climate, frequent appliance of liquid manure, and the practice of growing fruit trees in the meadows prevent drought in Switzerland. Mr. Director Page, of the celebrated Condensed Milk Company at Cham, also assured me that were he growing cattle in America he would fertilize the soil at once and heavily, regardless of its newness or richness. "Out there," he said, pointing to the manure heap, "is where the per cents are made." Mr. Page, whose observation and experience with the milk industry are large, approved heartily of the Swiss practice of feeding the cows in the stalls. It is economy to cut the grass and carry it in, as against permitting fine meadows to be tramped out of existence, grass wasted, and cows worried to death with flies. He opposes the overheated Swiss cattle-stalls, however, as will be seen later in reference to his practice with his own fine herd. With him the safe middle ground is adopted. His barns are very warm, but thoroughly ventilated, and his cows are marched out to exercise, air, and water daily.

As little but grass and hay are fed in Switzerland, it is requisite that

these be of the best quality and of sufficient quantity. It is estimated that one and a half to two Swiss acres (40,000 feet to the acre) produce sufficient grass for one cow. In the upper Alps more pasture is reckoned, as there is no fertilizing possible there. Mr. Page expects to keep next year 100 cows on 150 acres of grass land, and not a penny to be spent for extra feeding. What quality and quantity of milk he is accustomed to have from his cows will be shown later. There are two to three grass crops in Switzerland yearly; the first in the beginning of May, the second at the end of July, and often another early in October. This rapid grass-growing is, of course, largely the result of a moist climate; but constant fertilizing and extraordinary care of meadows, in the way of watering, draining, &c., aid in no less degree than the climate. It is probable that were Americans to spend the money in fertilizing and improving their meadows that they now spend on all sorts of newly-invented "feeds," they would have more milk and better butter.

A Swiss acre of grass land is worth, on the lake of Zurich, about $300 to $400. I mention this that an idea may be had of the capital employed in milk industry here, apart from the stock and the running expenses.

Naturally, the thought occurs, if the Swiss can do well selling milk at $2\frac{3}{10}$ cents a quart from cows costing $100 apiece, fed from grass at $300 to $400 an acre, what ought Western Americans be able to do, selling milk at the same price, buying cows at $50 apiece and grazing land at $50 an acre?

Reliable details, given on the next page or two, will show that the estimates as to Swiss milk production are not incorrectly estimated, though, owing to dear land, the profits are not remarkable; and the reader can say whether western grazing lands and cows are not readily to be had at the figures mentioned. Dairy hands, or *sennes*, as the Swiss call them, are paid about $10 per month and board. Board is estimated at another $10. One hand can care for 12 cows or more, making the expense of caring for a herd of 50 cows about $80 per month, or, say, $1,000 per year.

The reasons why milk-producing is not enormously remunerative in our country, and especially in the West, are:

1st. The neglect of properly fertilizing, draining, and watering the meadows.

2d. Dear labor; and this could be wholly counterbalanced by proper use of the manure heaps.

3d. Our enormously-expensive fences.

Were the millions and millions of dollars now wasted in fences in the United States to be expended in building good roads, not only present profit would accrue to cattle-holders, but future generations would call us blessed. In the West, it is safe to say, land would rise in value a hundred per cent. in a single decade.

Three causes impress me as furnishing the foundation of Swiss dairy success:

1st. Good sweet grass.

2d. Pure running water.

3d. Systematic economy.

Is there any reason in the world why we in America cannot have these simple necessities, if we set rightly about it?

Running water we certainly have, or our farms are not fit for cattle.

If our grass is not quite up to the Swiss grass, we can make it so by proper liquid manuring, by draining, by watering, and, in short, by devoting more money to the meadows and less to high feeding.

There are few creameries in Switzerland. Usually, the milk is manufactured into butter and cheese at the dairies, or, if near enough to towns, the dairyman becomes simply a milkman, collects the milk of all his neighbors and delivers it to his town customers. It is principally to production and sale of milk as milk, and not its manufactured form, that I confine this report, reserving for another paper, if desirable, a detailed account of Swiss methods of condensing milk and making butter and cheese. The profits on selling milk from the cows, it is to be presumed, are not so materially different from the gains from butter and cheese. Knowing the first, we may approximate the profits on the latter.

The farmers of canton Zurich receive nearly 3 cents a quart or liter for their milk, delivered at the dairy. The dairyman adds his trifling commission on delivery to the city dealers, who sell it at an average of 4 cents a quart.

The Cham Milk Condensing Company pays the farmers 13½ centimes, or about 2.6 cents, per quart. I use the measure quart and liter as being very nearly the same, equaling 2 pounds of milk.

It is rare that milk sells for less than the price mentioned, as it is worth this much for manufacturing into butter and cheese. A fair average for cows in canton Zurich is ten quarts of milk per day the milking year through. In cantons Schwytz and Zoug, the average is but little different.

In these cantons the brown Schwytzer cow only is kept for milk; and it is of the milk production of the brown Schwytzer principally that I purpose speaking in this report. The Schwytzer is a beautifully formed cow, of mouse color, running into brown; large, straight back, usually with white streak; short, light horns, two-thirds white, with tips black; nose tipped dark gray, with light borders; dark gray mouth and tongue; udder large, white, and smooth; usual weight, about 1,200 to 1,300 pounds; exceptional weight, 1,500 pounds. Those kept much in the higher Alps weigh about 900 pounds. Disposition is extremely kind and docile. There is a second distinct and excellent race of cows in Switzerland, kept almost exclusively in the western cantons, known as the "fleck" or spotted cow. Formerly these fleck cows, together with the little, pale, spotted cows of the Simmenthal, were held in as high esteem as the brown Schwytzer, and the race is still superior to the Schwytzer for fattening purposes, while some of the most famous cheeses known to the market are from the milk of the spotted breeds of West Switzerland.

There are a few other breeds in the country, as the Toggenburgers, Erlenbachers, Ormonts, &c., mostly offshoots from the two great races, and usually inferior, as crossing in Switzerland has produced no good. Every farmer is careful to keep his own stock of cows pure, and of a kind that is likely to reproduce itself in its offspring. Perhaps it is this great number of good cows of pure blood that has helped make the new Swiss herd-book a failure. It began life recently with as many "pure bloods" as most herd-books contain after twenty years' existence. Of course, the control was not likely to be kept up on such a scale, and the result is confidence.

One of the first dairies visited was that of a Mr. S———, situated near Thalweil. Mr. S——— collects and sells to the city the milk of 75 cows. These 75 cows furnished 700 quarts daily, or about 10 quarts each, year in year out, not counting the milk retained at home for the use of the families owning the cows. In July 850 quarts daily are sent to the dairy. The milk is sold at 16 centimes, or 3⅛ cents, the liter, and the owner

finds this more profitable than making butter and cheese of the same milk. Evening milk, skimmed next morning, sells at 13 centimes (5 centimes equal 1 cent). Milk and cream together, 24 hours after milking, sells at 16 centimes. Pure cream sells at this dairy at 24 cents per quart.

In this neighborhood the farmers add a little bran to the cows' hay in winter time, but not over 4 pounds daily fed dry, and costing 1 cent the pound. Occasionally, bran is changed to one or two cents' worth of turnips daily in winter. Cows in this district are worth $90 to $100 each; exceptionally good ones are valued at $125. Land is worth from $300 to $400 the acre. One of the neighbors keeps 10 cows, with aid of one farm-hand, and sold $1,200 worth of milk last year; an exceptionable case.

Mr. B———, of the same district, keeps 18 cows, with aid of one hand. His cows give 12 to 15 quarts of milk daily throughout the milking season. He is a rare exception as to high feeding, giving his cows 3 pounds of shorts daily summer and winter. Shorts cost 7 centimes the pound. He has but 20 acres of grass land. He sells calves from all his cows yearly, mostly at 3 days old, at from $5 to $7. His cows all calve in the autumn. Calves kept for veal, to ten weeks old, sell at an average of $21. Mr. B———, like most other Swiss farmers, curries his cows daily, and cares for them as he would for fine horses. He has not grass land enough, hence more extra feed.

A calculation of the earnings of 50 cows, based on the experience of Mr. S——— and Mr. B———, would show about as follows:

RECEIPTS.

Milk of 50 cows, at 10 liters, for 270 days, sold at 3 cents a liter, would be		$4,050
50 calves, at $5		250
		4,300

EXPENSES.

4 hands, including board, $24 per month	$1,152	
Extra straw for litter, say	200	
Taxes, &c	200	
Repairing	100	
		1,652
Difference, or gain		2,648
The original investment for the farm, say 100 acres at $300		30,000
50 cows, at $100		5,000
Total		35,000

The clear gain, then, equals about 7½ per cent. interest on the whole investment.

Of course, this is not large interest; but the profit from the fruit-trees grown on almost every farm, which often exceeds the gain on the cows, is not taken into consideration.

I found a very fine herd of cows at the celebrated monastery of Einsiedeln, up in the mountains of canton Schwytz. The monastery is many centuries old, and its cattle are known to be among the best of the brown Schwytzer race in existence. Here, as elsewhere in Switzerland, the quantity of milk is faithfully recorded.

There are between three and four hundred persons at the Einsiedeln cloister, including 80 brothers of all classes, 160 students, 70 servants, beside workmen, guests, &c. The milk of 21 cows at the cloister barns

is consumed by the *personnel* of the monastery. One hundred and twelve head of cattle are kept; of these 57 are Schwytzer cows. They receive no feed except grass and hay the year through. The average of milk is 10 liters per cow the whole year through. The highest quantity reached is 20 liters daily, given by some 20 cows of the 57 in the months of May, June, and July. The cows calve mostly in autumn and spring; the latter season is preferred. At present, July 6, more than half the cows are herded on the Upper Alps. They were taken up in May, and will come down in September. The milk while up there will average much less, but it will be excessively rich, owing to the sweetness of the short and scarce Alpine grass. Only the lighter cows are sent up on the Alpine slopes. Their milk while there will be made into butter and cheese in the little stone huts of the herdsmen, or *sennes*, and these will be brought down in the autumn, when there will be a village festival in their honor. The cloister keeps five hands only for the 112 head of cattle; these do all the feeding, grass-cutting, milking, &c. The wages paid them are very low; in summer 6 francs a week only and board. Board is as follows:

Breakfast: Coffee, milk, and bread. (No butter.)

Dinner: Soup, wine, meats, vegetables, and bread. (No meat Fridays and holidays).

Supper: Soup, potatoes, and bread. Potatoes changed for meat half the evenings.

They work from 4½ in the morning till 7 in the evening. One man can milk 12 cows in 1½ hours. In winter, one man is expected to attend to 15 cows.

Good cows of Einsiedeln sell readily at $100 to $125. Even $150 to $200 is not so rare a price. These are not fancy prices. They are given because the cows warrant the investment. Good young Schwytzer bulls at Einsiedeln are worth about $150. One of the cloister bulls, 3 years old, which took second premium at Lucerne cattle fair, is valued at $200. He was worth $250 at two years old. At three to four years old, bulls are sold to the butcher. Most of the Einsiedeln calves are raised; the poorer ones are sold at two weeks old to the butchers, and bring about $6. Only one opinion prevails at Einsiedeln as to feed for milk cows. Quantity of milk may be, and is, increased by artificial feed, but the quality, they claim, as do most dairymen in the country, is reduced.

Not far away from Einsiedeln I found a small herd of cows, kept by a Mr. S———, who is a very exceptional "feeder" for a Swiss. He adds bran and shorts and vegetables to his hay, and has an extraordinary pride in his cows. For fifty years Mr. S——— has been keeping cows on this same farm. Every detail of his establishment was given me, copied from carefully-kept records. The average of results were not materially different from the average of other small and select herds. His cows give 10 liters of milk each daily, year in, year out. He has what is a great exception, well-ventilated cow-stalls. He gives the usual allowance of hay, viz, 30 pounds daily to the cow, and a spoonful of salt every other day. All his milk goes to neighboring factories, and is paid for at the stall when milked at 4 cents a quart. His fine herd average about 1,300 to 1,400 pounds in weight. They are never out of the stall, not even to water. It seemed an unusual occasion for them when he had them all led out into the yard for my inspection. There are exceptionally good milkers among them. Some of the five and six year olds give 15 quarts a day for one year after calving. One cow gave 18 quarts a day two months after calving. Another cow, eight years old, did about as well. Another gave 21 quarts of milk for three months after calving, and an average of 12 quarts during the

remainder of the year. She produced 21 pounds of butter per week for three months, and extraordinary amounts the year through. It is noticeable that this cow received almost no artificial feed. She is, too, a rare exception, even for the Schwytzer breed.

Perhaps no more reliable statistics as to the milk production exist than are kept by the Anglo-Swiss Condensed Milk Company of Cham, Switzerland. This is, I believe, the largest and the most successful concern of the kind in the world. It uses the milk of not less than five to six thousand cows at the principal factory in Switzerland, and of as many more at the company's condensing establishments in England.

The company's director, Mr. George H. Page (an American), feeds (as private property) the very finest herd of the brown Schwytzer cows I have found in the country, and it is principally this herd of cows, and not the milk-condensing factory, I purpose reporting briefly at present. Mr. Page keeps his herd of 30 cows in a large rectangular house, with brick walls and tile roof. The very broad ceiling is unsupported except by the outer walls. It is very high, and the whole immense room where the herd stands is plastered throughout, and furnished with every modern improvement as to mangers, floors, ventilation, &c. This fine herd ranges in age from three to five years, few being over three years, and the cows average in weight 1,400 English pounds. One of them, a four-year-old (an exception, of course), weighs 1,810 English pounds. The cows of this herd are, perhaps, in all respects, above the average of the Schwytzer, as they were mostly choice selections, and paid for accordingly, at prices reaching in single cases $200 to $240.

Mr. Page feeds only grass and hay summer and winter, and that is worth bearing in mind. His cows are taken out to exercise daily, but never graze. Twenty-six of these three-year-old heifers produced in April, May, and June (after first calf) 28,076 liters of milk, or 12 quarts per cow daily; a large average when it is remembered that it includes almost every cow in the herd, and that none were at the best milking age. Mr. Page counts on these 26 cows averaging 15 liters daily this coming year. Three of the two and three-fourths years old heifers gave at highest points 19½ quarts daily, and averaged 10 quarts the year through. Three others, after second calf, gave 24 quarts daily for three months, and maintained a high average throughout the year. It will be most interesting to see the coming year's record of these Swiss cows, stabled and fed on common-sense principles.

Mr. Page's advice to those who would buy Swiss cows for importation would be to buy for inbreeding only, and not for crossing. He retains only the very best calves, perhaps 1 in 6, and sells the remainder to the butchers. It is worthy of note here that Italy and other states are rapidly buying up choice specimens of Swiss cows for exportation, so that cattle-growing here bids fair to assume larger and more profitable proportions. The Milk Condensing Company of Cham pays at present to farmers for many miles around an average of 13½ centimes, and the farmers, with their dear land and their dear cows, are apparently satisfied.

The reports of the milk and butter of the many thousands of cows contributing to the condensing factory at Cham are most interesting.

In the year 1881 the condensers used the milk of between 5,000 and 6,000 grass and hay fed cows. They were milked about nine months, and produced on an average 5,315 pounds of milk per cow; that is, 19.7 pounds or 9.8 quarts of milk per cow daily for the milking season.

In England last year 5,000 to 6,000 of the famous short-horn cows furnished to the English branch of the establishment an average of 4,668

pounds milk per cow for the milking year, showing a difference in favor of the Swiss cows of 647 pounds of milk per year.

The English farmers add oil-cake, roots, and other artificial food to the hay of the cows, but they do not stall them so warmly in winter. In general the milk supply is better in Switzerland in winter than it is in England. According to the report of the Department of Agriculture of the United States in 1875, the highest average of milk received at the best dairies of the State of New York reached 4,008 pounds for a high-fed cow in the year, a difference in favor of Swiss cows, without extra food, of 1,307 pounds per year. The average of fat contained in the milk of these thousands of Swiss cows is 3.3 per cent., though single cows show 4 to 4½ per cent. fat or oil in the milk.

The terms "fat" and "butter" are used synonymously, for while there is more butter than fat or oil contained in milk, the butter cannot be taken wholly away; hence the amount obtained about equals the fat. It is found that something less than 31 pounds of milk is required to produce 1 pound of butter. At this rate the Swiss hay-fed cows furnishing milk to the Cham Condensing Company could produce, on an average, say 175 pounds of butter to the cow for the season, an average that would bear most favorable comparison with the average butter of 6,000 high-fed cows of the State of New York.

The object of this report has not been to argue that Americans should do away with artificial feed wholly, but to show that we do too much high feeding; that the money thus expended could be used to better advantage—

1st. By improving our breeds of cows.

2d. By improving and fertilizing our meadows.

3d. By having warmer stalls, better care for cows, and by the practice of sensible economy.

I think the statements of the report, all collected with the greatest care, go to show that the Swiss, with enormously dear land, dear cows, and under other disadvantageous circumstances, produce, by their system of feeding, fertilizing, and economy, more and better milk, butter, and cheese on an average than we do.

S. H. M. BYERS,
Consul.

UNITED STATES CONSULATE,
Zurich, July 31, 1882.

THE ST. GOTTHARD TUNNEL.

REPORT BY CONSUL BYERS, OF ZURICH.

The recent opening of the St. Gotthard Railway through the Alps to Italy represents the completion of what is perhaps the most stupendous work of engineering known to the world.

What the ultimate effects of this short road to Italy may be on the commerce of Europe it is too early yet to calculate. The immediate prospect, however, is that the methods of trade as between Germany, Switzerland, Italy, and part of France will, in a sense, experience a revolution.

Before the completion of the tunnel I was permitted by the chief engineer to examine the methods of work and the machinery in use, and to know something of the estimates of costs, &c., concerning which I wrote at the time.

The full completion of the railway, however, and its opening to travel and trade offer opportunity of showing *facts*, instead of mere estimates, as to the enormous expense of the work, the time required in building, and some of the immediate results.

The St. Gotthard Pass is many centuries old, and is over a chain of mountains the highest in Europe, though not showing the highest single peaks. In the snow-fields, almost immediately above the new tunnel, rise the principal rivers of Switzerland flowing north and south, the Reuss, the Picino, the historic Rhone, and the classic Rhine.

The scenery along the route of the pass is of sublime grandeur. The very top of the pass is a little plateau or valley, a few miles in length, surrounded by dreary rocks, with mighty peaks and snow-fields in the near distance. It is silent and desolate, and, with the single exception of the old stone hospice, no signs of human life or marks of human hand are to be seen. The height of the old post road in this little valley is 7,000 feet above the sea. Some of the peaks in view are 9,000 to 10,000 feet in height. For centuries this mighty mass of mountains has stood as a barrier between the north of Europe and the sunny lands of Italy. The old Helvetians, under Orgetorix or Diviko, had not greater longings for an easy way to the warm southland than the Europeans of modern civilization have had.

Before the building of railroads it was a journey of weeks to travel around the higher Alps into Italy from Switzerland. A foot-path was made over the St. Gotthard from the valley of the Reuss as early as the beginning of the thirteenth century, but it remained a dangerous and dizzy foot-path only. It was only a hundred years ago that the first vehicle of any kind was dragged along this foot-path over the Alps.

In 1820 the canton Uri, aided by the confederacy, commenced building a post-road along this mountain path, and at an expense that was something enormous, considering the time, the smallness of the population, and their poverty. The road was, like all Alpine post-roads, a specimen of bold engineering. It crossed tremendous gorges, clung in dizzy places to the steep sides of high mountains, swept around sudden corners and angles, and reached heights above those of any previous mountain road. Its novelty and the grand pictures of the route soon made it a chosen way to Italy for tourists, while the commerce of Switzerland changed its whole course. This post-road was 18½ feet wide, and had an average grade of 10 per cent. At points where avalanches threatened it, it was bridged or roofed over, and the great masses of snow and ice rolled by, leaving the road, the mountain diligences, and their traveling occupants unharmed. As a mountain-pass post-road the St. Gotthard was and is unexcelled; but modern inventions, greater progress, and unheard-of travel have combined to make a shorter route to Italy a necessity. Man could not go *over* the Alps by shorter ways, but he could go *through* them.

The idea of piercing the St. Gotthard chain of mountains is as old as railroads in Switzerland. Engineers in Switzerland have lived and died with the one great thought of connecting the cold north with the sunny south by iron rails through the mountains.

The first railroad built in the country was opened in August of 1846. It was the line from Baden to Zurich, and the proposal was even then made to ask concessions to enable the company to continue its lines into the mountains of the Grisons and over one of the high passes. The rivalry of other companies, the jealousy of different cantons and towns, and the want of government aid all conspired to postpone and defeat a measure wished for by the whole people.

The history of the thousand obstacles to overcome before a route and plan were determined upon would here be neither interesting nor profitable. Suffice it to say that the question of building the St. Gotthard road became a vital one to the whole people, and at last a *political* one, and one not only national but international in its character. After endless jealousies and intrigues on the part of individuals, of companies, of towns, and cantons, a society or union was brought about in the year 1863. The cost of the great work was estimated at 187,000,000 francs, a sum too great to be risked by private capitalists alone.

In 1869 the Prussian Chambers signified an intention of helping to build the road by a suitable subvention. Baden and Wurtemberg also promised substantial aid, and by 1871 (after the conclusion of the Franco-German war), a promise of important subventions to the scheme was agreed upon by treaty on the part of the Swiss Diet and the German and Italian Parliaments. In this treaty Switzerland agreed to pay 20,000,000 francs to the scheme, Italy promised 45,000,000, and Germany 20,000,000 francs, and the Swiss Government undertook to supervise the work. On the 6th of December, 1871, the company of the St. Gotthard Railway was organized at Lucerne, with Dr. Alfred Escher as president. The company issued stock to the amount of 34,000,000 francs in £20 shares, and 68,000,000 francs in mortgage bonds.

The contract for the great tunnel was undertaken by L. Favre, of Geneva, supported by a company of well-known capitalists. He agreed to complete the work in eight years, forfeiting large sums of money for every single day's delay in the final completion. The work commenced on the north side of the Alps on the 4th of June, 1872, and at Arolo, on the south side, on July 2 of the same year. The undertaking was not more than fully under way when it was discovered that a tremendous mistake had been made in the estimates; it was found that the work would cost, if continued as projected, not 187,000,000 francs only, but 289,000,000; hence, a deficit liable to be on hands of 102,000,000 francs. Then came the crisis in the history of the road. All sorts of bad results followed immediately. The stock of the company ran down to a minimum, and hundreds of families were nearly ruined by the collapse. The bonds shared in the crash; and even the most ardent friends of the enterprise feared that the money which had been so lavishly given was buried under the mountains forever. It became a question whether the work would not have to be abandoned. There was but one choice, either to lose all that had been done or to add many millions more to the subvention. The times were very hard. Financial crises were imminent everywhere; and, to add to the threatening calamity, war was raging on the continent. Everybody was discouraged. Some of the little cantons of Switzerland, the very ones that expected the most benefit from the enterprise, refused to lift a hand or to spend another dollar.

In the face of all opposition, however, and after surmounting many new obstacles, additional capital for the prosecution of the enterprise was secured. Some of the approaches to the great tunnels were abandoned, for the time reducing the expense. Germany, Switzerland, and Italy added largely to their promised subventions, while leading Swiss railways and cities voted sums of money in proportion to the benefit they hoped to reap.

The work on the tunnels during this financial crisis of the undertaking had never quite stopped. Any unusual delay, in fact, would have proved ruinous to the contractor, Mr. Favre, as his agreement was to forfeit $1,000 for every single day the work might fall short of comple-

tion at the time stipulated. Should the delay extend to six months beyond the stipulated time (October 1, 1880), the forfeit was to be $2,000 per day.

On the other hand, $1,000 per day was to be paid to Mr. Favre for every day the work should be completed in advance of the time stipulated. Unfortunately, Mr. Favre died when the work was scarcely half done. Had he lived, and had Swiss jealousy not driven Mr. Hellwag, a celebrated German railway-builder and the chief engineer of the Gothard enterprise, from his post, the St. Gothard and its tunnels would, in all probability, have been completed within the time contemplated.

A brief description of the road and tunnels will indicate what an enormous work it was that the St. Gothard Company, Favre and his confrères, undertook to build through the granite and under the snow-fields of the Alps.

The Gothard Railway proper extends from Immensee in Switzerland, to Chiasso in Italy, a distance of 113 miles. There are, in all, not less than fifty-six tunnels, comprising more than one-fifth of the whole line. Many of these tunnels are constructed in spirals to enable the road to make very great ascents within short distances. These spiral tunnels were the invention of Mr. Hellwag, the chief engineer. There are, besides those wonderful and difficult tunnels, many lofty viaducts, bridges, and complicated galleries. The main tunnel is 9¼ miles long, and others exceed 6,000 feet in length. There are, in fact, 23 miles of tunneling on this short line. The width of the great tunnel is 26 feet, and the height nearly 19 feet. At Airolo it is 3,756 feet above the sea. At Gaschenen, on the Swiss side, the elevation is 3,638 feet above the sea. The strata through which it was necessary to pierce the great tunnel was estimated in advance as follows:

Commencing at the Swiss end—

	Feet.
Granitic gneiss	7,000
Schistous gneiss lying vertically in ledges	1,000
Crystalline limestone with streaks of black serpentine	500
Micaceous schist	3,000
Gneiss rich in mica	20,000
Schistous gneiss with quartz	5,000
Mica schist	12,000

With exceptions of certain reaches of soft clay, almost impossible to roof, on the Italian side, the advance estimates of geologists proved very nearly correct.

The improved boring-machines used for drilling the tunnel were driven by compressed air, produced by immense Gerard turbines. These turbines were driven by the rapid river Reuss. The compressed air was conducted from the compressors outside to the boring-machines in the tunnel through iron tubes 6 inches in diameter. This air, escaping from the machines as they worked the drills against the face of the rock, served to ventilate the tunnel. At the north end of the tunnel the turbines delivered into the reservoirs over 3,500,000 cubic feet of compressed air daily, which, escaping at the drills, pushed back and out of the tunnel some 210,000 cubic feet, daily, of bad gases and smoke. In spite of the escaping air, however, the ventilation of the tunnel remained bad. It was not the natural gases of the tunnel only, nor the presence of thousands of workmen and animals, but the hourly explosions of dynamite used in blasting, that made the tunnel almost unendurable at times. There were some fifty air-drills at work in each end of the tunnel constantly, being operated at seven points of attack; that

is, in the main heading, and at points right and left further back, as well as on banks of rock behind, that were left when pushing the gallery forward. The main heading was worked on the Belgian system, viz, boring a hole some 8 feet square, in advance, where the top of the tunnel was to be made. Often, too, this advanced gallery was finished up and arched before the bottom and sides of the tunnel were commenced or even excavated. The complete arch was usually put in in sections of 18 feet, and was always allowed a few days to settle before other sections were joined on. The advance made in the galleries at the heads of the two tunnels approaching each other (parties worked from both the Italian and Swiss sides) was usually about 21 feet for the two sides per day. The whole structure, as fast as excavated, was lined with a circular wall, or tube, of masonry 18 to 30 inches in thickness.

The work was done principally by Italians. No other workmen would accept so much toil and danger for so little pay. Hundreds, possibly thousands, of these Italian workmen have been stricken down with diseases produced wholly by the bad air of the tunnel. They worked eight hours per day, receiving from 3 to 6 francs a day and boarding themselves. Of course the greater number received 3 francs only. They saved part of their wages, however, and sent it home to their needy families in Italy. Their food was extremely limited in quantity and wretched in quality. It consisted usually of nothing but *polenta*, or some meal porridge. The statistics show that 310 of these Italian workmen were killed by accident during the building of the tunnel, and 877 were wounded or received minor injuries.

The final cost of building the St. Gothard Railway and Tunnel, in accordance with modified forms, is now reported at something over 200,000,000 francs, not including the rolling-stock and material for working the road.

On the 22d day of May, 1882, about ten years after the commencement of the tunnel, the festivities began in Luzerne in honor of its completion. These festivities were on a magnificent scale, including banquets, excursions, fireworks, &c. They extended through several days, every town on the line from Luzerne to Milan being in gala-day attire. They were attended by high official representatives of the German Empire, of the Kingdom of Italy, and of the Swiss Republic.

Passenger trains at once commenced running, and the tourist and goods traffic has already assumed immense proportions. The distance from Germany and North Europe has been lessened by at least thirty-six hours, while the conveniences and advantages to trade and travel by this Alpine line are almost beyond calculation.

What the political results of the completion of the enterprise may be must at present remain a matter of conjecture only. That new jealousies will be awakened, and new political combinations be determined upon, there can be little doubt. Already political writers are busy with the possibilities awaiting Swiss neutrality and independence in case of a European war.

The tunnel will make a movement of troops from Germany in the north to Italy in the south a matter of such rapid and easy accomplishment that France may easily fear alliances not to her advantage; and, seeking to compel a neutrality of the tunnel route and Switzerland, drive the latter into choosing sides with open enemies, at the risk of losing all in contests not of her own making.

Those who believe progress and rapid communication to be aiders of peace see nothing but friendship and closer unity of nations in the great Alpine highway. English opinion, at least whatever the Satur-

day Review may represent of English opinion, sees in the building of the St. Gothard road the reverse of peaceful results. "It would be idle to conceal the fact," says the Saturday Review, "that this St. Gothard tunnel has been conceived, carried out, and opened in a thoroughly bellicose and aggressive spirit. It is openly given out as a blow to France, not merely commercially but politically." The Review points out in detail the tremendous advantages this tunnel may give Germany, with Italy as an ally, in case of war with France. It ridicules the complacency of the Swiss in rapturously applauding the unusual embracing of the representatives of Germany and Italy, and boldly asserts that "the patriotic Swiss might read between the lines of Herr von Kendell's blandishments a suggestion that Switzerland ought to be either *Italian* or *German*."

Though speaking from an English, and a comparatively disinterested standpoint, the Review forgets, apparently, that with the Swiss neutrality as to European wars and patriotism are near akin. Swiss neutrality, unless forced, is as old as Swiss independence, and is, by Swiss leaders, considered the only sure guarantee of continued independence. The Saturday Review overlooks, too, the seldom concealed sympathy felt by most Swiss for France and for French institutions, as well as the more material fact that France is herself expecting within a reasonable time to have an Alpine tunnel of her own into Italy via the Simplon Pass. A tunnel, too, on the route of the Luckmanier Pass, from southeast Switzerland, is seriously contemplated, and national aid has been promised.

These additional routes will lessen the importance of the St. Gothard as a line of trade and travel, and, together with Swiss love of independence, would create obstacles for German war strategists that even an unnatural Italian alliance could not overcome.

S. H. M. BYERS,
Consul.

UNITED STATES CONSULATE,
Zurich, June 12, 1882.

PORT CHARGES AT CADIZ.

REPORT BY CONSUL OPPENHEIM.

I have the honor to forward herewith certain data bearing upon the port charges and other dues imposed upon vessels trading to Cadiz, and also an exhibit of the facilities afforded at this port for docking and repairing sea-going craft.

Tonnage dues are imposed upon all vessels trading to or from Spanish ports, without distinction of nationality. Vessels are divided into three classes, each paying a different rate, as follows:

Vessels engaged in the coasting trade, or between any of the Spanish colonies and the mother country: This class pays 0.75 peseta for each ton of 1,000 kilograms discharged, and 0.50 peseta for each passenger landed; 0.50 peseta for each ton loaded, and 0.50 peseta for each passenger taken on board.

Vessels trading between Spain and European countries, or any ports situated on the shores of the Mediterranean Sea, and on the African Atlantic coast as far south as Cape Magador: This class pays 1.25 pesetas per ton discharged, and 0.75 peseta for each passenger landed, and 1.00 peseta for each ton of merchandise and each passenger taken on board.

Vessels trading between Spanish ports, and those of all countries not included in above two classes: This class pays 2.50 pesetas per ton of cargo discharged, and 1.25 pesetas for each passenger landed, and 2.00 pesetas for each ton of merchandise and each passenger taken on board.

Vessels belonging to the first class are accorded certain exemptions when trading in some of the bays and on some of the coasting routes, but these are only of local interest. Vessels leaving Cadiz with a cargo of salt are exempt from dues upon loading (derechos de carga); vessels entering the port in distress, and having to discharge for repair or survey, are also exempt, provided they reload the original cargo and proceed on their voyage with it. Tonnage dues are only exacted upon cargo, not upon ballast. For greater clearness I give the following, showing what a vessel pays in each supposable case:

Entering port in ballast and leaving in ballast, nothing.

Entering port in ballast and leaving with salt, nothing.

Entering port in ballast and leaving with cargo (except salt), loading dues.

Entering port with cargo and in ballast, discharging dues.

Entering port with cargo and leaving with cargo, loading and discharging dues.

Entering port in distress, and discharging and reloading original cargo, nothing.

It is the custom of this port to take cargo from or to vessels lying in the Bay of Cadiz free of charge to the master; lighterage for ballast is 1.50 pesetas per ton.

Pilotage is compulsory, both in and out, and the charge made is a fixed one, independent of the size, rig, or draft of water; this, with the "town dues," completes the list of port charges. These "town dues" are based upon the number of the crew and the length of stay in the harbor. The following is a specimen bill for an American vessel of 500 tons register, coming from the United States with a general cargo, estimated at 800,000 kilograms gross weight, and leaving for America, carrying cargo of merchandise (not salt) estimated at 800,000 gross weight:

Pilotage from sea	$9 05	
Pilotage to Puntales	7 05	
		$16 10
(Both are compulsory.)		
Tonnage dues upon unloading:		
800,000 kilograms, at 2.50 pesetas per 1,000 kilograms		400 00
Tonnage dues upon loading:		
800,000 kilograms, at 2 pesetas per 1,000 kilograms		320 00
Town dues, about		3 00
Pilotage to sea		15 30
Total		754 40

For shifting berth there is a charge of 20 pesetas. In the above account the dollar is taken as equivalent to 5 pesetas, the difference of about 3½ per cent. being allowed to cover loss in exchange.

At Trocadero, a point on the bay opposite this city, there is a magnificent graving-dock, belonging to the Spanish Transatlantic Company. Said dock is available for the repair of the largest sized vessels; it is most substantially built of solid stone; has a length of 500 feet by 63 feet wide, with a depth of 26 feet over the sills at high-water. The daily rent is as follows:

The first 500 tons (as a minimum) pay 250 pesetas; additional to 1,000, at the rate of 0.45 peseta per ton.

Additional 1,001 to 1,500 tons, at the rate of 0.40 peseta per ton.

Additional 1,501 to 2,000 tons, at the rate of 0.35 peseta per ton.
Additional 2,001 to 3,000 tons, at the rate of 0.30 peseta per ton.
Additional 3,001 tons and upwards, at the rate of 0.25 peseta per ton.

Entrance day is paid double on account of labor of pumping; pilotage, 10 per cent.; and shoring 15 per cent. of the entrance fee. Under above tariff a vessel of, say 3,049 tons, would pay as follows:

	Pesetas.
First 500 tons	250
Additional 500 tons, at 0.45 peseta	225
Additional 500 tons, at 0.40 peseta	200
Additional 500 tons, at 0.35 peseta	175
Additional 1,000 tons, at 0.30 peseta	300
Additional 49 tons, at 0.25 peseta	12.25
	1,162.25
Extra for docking	1,162.25
	2,324.50
Pilotage, 10 per cent. on entrance fee	232.45
Shoring, 15 per cent. entrance fee	348.67
Charge first day	2,905.62
All other days	1,162.25

If work is carried on Sundays and holidays charges are 50 per cent. additional for such days; if no work is done on these days, there is a reduction of 50 per cent. on such day's rate. Vessels entering the dock merely to clean and paint bottom, have the benefit of a low tariff, comprising up to 3 day's dock occupation, as follows:

For a minimum of 500 tons, 650 pesetas.
Additional 501 to 1,000 tons, at the rate of 1 pesetas per ton.
Additional 1,001 to 1,500 tons, at the rate of 0.90 peseta per ton.
Additional 1,501 to 2,000 tons, at the rate of 0.80 peseta per ton.
Additional 2,001 to 3,000 tons, at the rate of 0.70 peseta per ton.
Additional 3,000 tons and upwards, at the rate of ——

These rates including all charges for pumping, piloting in and out, shoring, &c. There is, besides the graving-dock, also a hauling-slip for smaller vessels, belonging to the same company. This slip has a length of 136 feet, on an incline of 2½ feet to the 100, with a draft of water of 11 feet aft and 7 feet 5 inches forward.

The following are the rates charged per day:

	Pesetas per ton
The first 100 tons as a minimum	0.62½
Additional from 101 to 150 tons	0.564
Additional from 151 to 200 tons	0.50
Additional from 201 to 250 tons	0.43¾
Additional from 251 to 300 tons	0.37½
Additional from 301 to 350 tons	0.31¼
Additional from 351 to 400 tons	0.25
Additional from 401 to 450 tons	0.18¾
Additional from 451 to 500 tons	0.12½

The hauling-up and the letting-down days are charged double; pilotage 15 per cent., and shoring also 15 per cent. of the entrance rate.

Repairs of all kinds to vessels, machinery, and boilers are executed by the company owning the graving dock and hauling-slip.

Messrs. Thomas Haynes, English ship-owners and engineers, of Cadiz and Gibraltar, have an extensive ship-yard and machine-shop at this port, and also possess diving appliances for ascertaining the state of vessel's bottom; and making temporary repairs without having recourse to docking.

ERNEST L. OPPENHEIM,
Consul.

UNITED STATES CONSULATE,
Cadiz, July 11, 1882.

THE COTTON CROP OF ACAPULCO.

REPORT BY CONSUL SUTTER.

The cotton crop in this consular district for this year has been very abundant.

The coast districts to the westward of this port, inclusive of the bottom lands of the mouth of the Fatacula River, and the lands of the Sabana Tres Palos, in the immediate vicinity of Acapulco, have produced 20,000 quintals of ginned cotton.

The coast to the eastward of Acapulco, as far as Puerto Angel, has produced, according to reliable information, 12,000 quintals of ginned cotton; the entire crop showing thus a total of 32,000 quintals of clean cotton.

This cotton is not grown on large plantations; labor being very scarce and high, say from 30 to 50 cents for an indifferent day's work of about eight hours, no staple can be cultivated here on a large scale, and each man for himself alone cleans a piece of land and plants his cotton, more or less according to his physical abilities and needs, to live the rest of the year at leisure; a father of numerous boys, as a matter of course, is supposed to plant more than another man without any help. As soon as the cotton is gathered it is sold in the seed to merchants or to the owners of the several ginning establishments, which all use American gins and steam engines, with the exception of two which use water power.

In these ginning establishments, of which there are twenty-one, the cotton is packed in bales of say 160 pounds, two of which constitute a mule load; no wagon-roads existing as yet in this part of Mexico. About 14,000 quintals of this cotton have been purchased by Acapulco merchants for account of some mills at Pepic, Guadalajara, and Mazatlan, brought to this port on mules or by water, and shipped mostly by Pacific mail steamers to San Blas and Mazatlan; only one Mexican sailing vessel having loaded 800 bales for San Blas.

Twelve hundred quintals of cotton are consumed annually by the mill Atoyac, established successfully with the advantage of water power in the very midst of a large cotton-growing district; only brown cotton cloth and yarn are manufactured there; each bolt of cloth, 30 inches wide and 32 Spanish varas long, sells for $3.50 cash, and is retailed at 12½ cents per vara.

About 10,000 quintals find their way to the mills of Oaxaca and Puebla; the rest goes to the mills in the States of Michoacan and Queretaro, and still another small portion to the old-fashioned hand looms of the Indian population of the interior.

The market price of the staple has been placed at Acapulco, $16 per quintal, and has ranged on the coast, according to circumstances, from $14 to $17. The quality of the staple would, in American quotation, be middling New Orleans best; the cotton produced on the lands of La Sabana and Tres Palos, and on the bottom lands of the river Nespan, commanding always two cents per pound more than the rest, owing to its superior quality and cleanness.

I do not hesitate to state that not one hundredth part of the land available for the cultivation of cotton is used, and that with modern agricultural implements and skilled labor the cotton crop would be a

thousand-fold what it is now. American cotton brought to the west coast of Mexico by the Isthmus of Panama, and by railroad from Vera Cruz to Puebla, Mexico, and Queretaro, competes successfully, and tends to lower the price of the staple in this district.

JOHN SUTTER,
Consul.

U. S. CONSULATE,
Acapulco, Mexico, June 28, 1882.

THE COMMERCIAL MUSEUM OF BRUSSELS.

REPORT BY CONSUL WILSON.

The Belgian Government has just opened in this city a commercial museum, under the control of the minister of foreign affairs. The declared intention of the government in creating this museum is for the exhibition of specimens of both raw materials and manufactures of all countries, and thus make it subserve the same purpose in commercial science as do mineralogical, geological, anatomical, and other similar collections in natural science. It is thought that by thus uniting in one building specimens of the industrial products of all nations, Belgian merchants and manufacturers will be furnished with increased facilities for practically studying the trade of other countries, and that the Belgian manufacturer by there seeing samples of manufactures adapted to the local tastes and necessities of foreign nations, may better learn the conditions upon which similar articles can be profitably manufactured, thus obviating the errors so often committed by not thoroughly understanding the wants and tastes of the people with whom trade is to be established.

In arranging the samples of this museum, a portion of the building is devoted to each category of products from all countries, and these are so classified that a visitor can at once see not only the origin of each specimen, but with the aid of a catalogue, gratuitously furnished, may also study its industrial value or adaptability to the markets he desires to reach. In addition to the information furnished in the catalogue referred to, there is also a "bureau of information," for the purpose of answering all inquiries, and explaining such additional facts as the government may possess relating to the origin, character, and practical purpose of each sample, with the cost of its production, and all other items relating to its commercial value. Another of the functions of this bureau is to procure, for the information of all concerned, plans and specifications of all proposed public improvements, either foreign or domestic, that may be yet open to a competition for contract, with a list of the awards of such contracts as have already been made, including the terms and conditions of the same. Desks, tables, and writing material are also provided for the convenience of visitors who may wish to avail themselves of them in taking note of any of the contents of the sample department.

There is also attached to the museum a library composed of technical works on the principal industries of the world, dictionaries of technology, catalogues of museums of art and manufacture, foreign journals of manufacture and commerce, and especially such as contain notices of proposed contracts for all kinds of material and labor products.

Another department, denominated the *Indicateur*, contains the spe-

cial archives of the museum. No outside correspondence is permitted directly with this bureau, and all communications intended for it must be first inscribed at the ministry of foreign affairs, after which they are sent to the museum by the chief clerk of the department of commerce and consulates. Documents issuing from this bureau must be signed and submitted for the approbation of the chief secretary of the department of state, and then forwarded to the minister of foreign affairs for his approval. All documents furnishing information in regard to the articles on exposition in the museum are regularly filed and numbered with a special number, so that by consulting the catalogue and the number of the document any article may at once be found by persons desiring to examine it and know its commercial value. A weekly journal is published in connection with the museum, devoted to practical information in the department of commerce and industry, gleaned from foreign sources by the Consuls and other foreign agents of the government.

The public is admitted, without fee, every day except Sunday, from half-past nine in the morning until four in the afternoon, and any person wishing special information, not obtainable from the samples, by signifying to the doorkeeper his desire to consult the bureau of information is at once admitted and the information given him, if possible, without question.

A capacious and costly building has been appropriated to this purpose by the government, and already a large number of specimens are arranged for exhibition; but it is intended so to extend this sample department as to embrace not only specimens of foreign manufactures, but every kind of foreign crude or raw material capable of being converted into manufactured products by the industrial establishment of Belgium. There is also in this building a very important department called the "package and finishing room." Under the just impression that the manner in which merchandise is packed, labeled, and otherwise prepared for the markets has much to do with the recommendation, the government has devoted these rooms to the study of this art in all its details. It is intended to here exhibit the finest specimens of packing and the most attractively prepared merchandise, both foreign and domestic, so that all concerned may see what importance dame commerce attaches to the fine dress of her wares. This is a most important branch of the instruction proposed to be imparted by this establishment, and will doubtless correct much of that flimsy and awkward packing of goods for foreign markets now so common in this country.

In announcing the object of the museum, the government claim that as a producing country Belgium has nothing to fear from the competition of any foreign country, either as to the quality of her manufactures, or the price of her soil products, but declares that in order to secure her legitimate degree of commercial success in distant foreign countries two things are absolutely necessary, the first of which is to free herself of her dependence on the other great commercial states that surround her, and sell her merchandise in foreign markets as their own, thus depriving her manufacturers of the profits of direct sales to the consumers; and the second is to better conform the manufacture of her merchandise to the tastes and wants of foreign markets.

Whilst admitting the difficulty to be encountered in accomplishing the first mentioned of these objects, it feels assured of the practicability of the other, and to this end it now proposes seriously to set to work. It has given orders to all its consuls and other foreign agents to collect from every part of the world where they may be located samples of such manufactures as are most in use there—to ascertain the styles and

patterns most esteemed, and to send them home to this museum, that the Belgian manufacturer may see and know for himself how he may more successfully compete for this trade.

These officers are especially enjoined to send home specimens of metallic ores, textile matter, and, indeed, all such other raw material as may in any way be capable of being converted into useful products, that the genius of the Belgian manufacturers may be thus stimulated to a more diversified product. In short, the government proposes to make this museum agreat industrial educator; and from the thorough manner in which it has been organized, and the liberal and methodical policy by which it will be administered, I doubt not that it will be a success in, at least, enabling the manufacturer to adapt his wares to the markets he wishes to reach, and in opening up new and direct commercial relations with distant countries which his merchandise has heretofore only reached as English, French, or German goods.

Whether a museum of this character would greatly contribute to the foreign sale of our manufactures I will not venture to say; but I am very certain that this trade could be greatly increased if our manufacturers and merchants, instead of attempting to force on foreign people the styles and fashions in vogue with us, would recognize the force of immemorial habit and the local peculiarities and prejudices of foreign people, and better adapt their merchandise to them.

As an illustration of what is meant, I will only mention the articles of locks, hinges, and window and door fastenings. No people in the world make these articles of so fine patterns and quality as we do, but unhappily for our manufacturers the social system, if not the climate, of almost the whole of this continent has led to the adoption of certain styles of doors and windows as well as their fastenings, for which our locks, hinges, and fastenings are not suited; and therefore, however superior ours may be in both design and quality they cannot be sold in any quantity. This is probably a strong case, seeing that it involves features of social life hard to change, and also a style of manufacture repugnant to our tastes, but there certainly are many of our manufactures now almost excluded from European markets which we could doubtless profitably sell if we would better adapt them to the tastes and prejudices, if not the wants, of these people.

JNO. WILSON,
Consul.

UNITED STATES CONSULATE,
Brussels, July 11, 1882.

EXPORTS FROM RIO GRANDE DO SUL TO THE UNITED STATES.

REPORT BY VICE-CONSUL PRELLER.

As regards imports from the United States, the absolute want of official statistics obliges me to refrain from giving their value. Suffice it to say, therefore, that American articles, both as regards manufactured goods, hardware, and drugs, are increasing in importance, as demonstrated by the manifests of the incoming vessels; and should things improve here, the magnitude of the outlet will naturally increase in proportion.

As regards exports, I need only refer to the usual tables, which show about an average.

The Germano-Brazilian exposition, in Porto Alegre, turned out a failure, and, as a climax, the building was destroyed by fire, evidently the work of incendiaries—some said by the people, others at the instigation of the directors. The results have been altogether negative, and, in view of its exclusiveness, nothing better could be anticipated.

Recurring to the matter of the bar, until further notice, 9½ feet is the draft of water which should be adopted by vessels coming this way. The government seems disposed to move in the matter, and as soon as active steps are taken in the right direction, I shall not fail to give timely information to the department.

WM. A. PRELLER,
Vice-Consul.

UNITED STATES CONSULATE,
Rio Grande do Sul, June 30, 1882.

Exports from Rio Grande do Sul to the United States during the year ending June 30, 1882.

	Value.
315,321 dry cattle hides	$990,773 59
33,719 salted cattle hides	153,521 42
320,098 kilograms hair	146,604 06
289,937 kilograms wool	85,455 82
839¼ tons bone ash	17,343 33
133,355 cattle horns	10,769 77
77,019 kilograms glue stock	5,690 01
486,308 shin-bones	4,043 97
4 bales nutria skins	881 75
66,710 horn-piths	779 23
2,087 kilograms old copper	300 06
7 tons artificial guano	159 19
19½ kilograms ostrich feathers	81 81
Total	1,416,404 01
Against in same period 1881	1,355,672 45
Against in same period 1880	1,827,475 49

Total exports from Rio Grande do Sul during the year 1881.

Description.	Quantities.	Value.
Salted and dry cattle hides	315,782 / 403,295	$3,480,000
Dried beef ..... kilograms	16,245,421	2,400,000
Tallow ..... do	1,359,674	240,000
Horse and cattle hair ..... do	404,166	190,000
Bone-ash ..... tons	5,053	120,000
Wool ..... kilograms	320,394	82,000
Shin-bones and horn-piths	756,679	82,000
Cattle horns	950,000	72,000
Horsehides	17,294	19,000
Glue stock ..... kilograms	189,501	12,630
		6,697,630

Besides the above, were shipped, 1,133 tons of tobacco to Europe; 1 cargo, 230 tons artificial guano, *id.;* also, large quantities of beans and maize to the north of the empire; dried fish, and onions, vegetables, &c., to the south of Brazil, principally Rio de Janeiro, and matté to the River Plate.

Vessels entered the bar of Rio Grande do Sul during 1881.

ARRIVALS.

Nationality.	Total number.	Number of crew.	Total tonnage.
American	2	13	498
Argentine	18	485	3,930
Brazilian	265	6,322	82,845
British	73	489	12,948
Costa Rican	1	7	230
Danish	26	149	3,930
Dutch	47	274	8,180
French	5	36	878
German	49	278	7,749
Italian	4	33	693
Norwegian	15	92	2,652
Portuguese	35	289	7,005
Spanish	6	55	788
Swedish	8	50	1,453
Total	554	8,572	133,779

Vessels from Brazilian ports, 251; from foreign ports, 303.

SPECIFICATION OF BRAZILIAN PORTS.

	Vessels.
From Aracaju	1
From Antonina	1
From Assu	1
From Bahia	26
From Cape Frio	3
From Itajahy	1
From Macan	18
From Pernambuco	67
From Paranagua	4
From Rio de Janeiro (including 74 steamers; 2 of war)	125
From St. Catherine's (including 1 steamer)	2
From Sergipe	2
Total (including 75 steamers; 2 of war)	251

SPECIFICATION OF FOREIGN PORTS.

Antwerp	5
Buenos Ayres (including one steamer)	4
Barcelona	3
Bordeaux	4
Bristol	1
Cadiz	48
Cardiff	12
Cette	3
Glasgow	1
Genoa	4
Greenock	2
Havre	2
Hamburg	32
Hull	1
Lisbon	7
Liverpool	21
London	2
Montevideo (including 80 steamers)	83
Newcastle	3
New Port	3
New York	8
Oporto	6
Richmond	26

	Vessels.
Rotterdam	1
Rosario	1
Setubal	2
Swansea	4
Trieste	5
Talcahuano	2
Tarragona	1
Valparaiso	1
Western Islands (including 1 steamer)	5
Total (including 82 steamers)	303
From ports in the United States	34
From ports in South America	91
From ports in Europe	178

Vessels sailed from the Bar of Rio Grande do Sul, 1881.

DEPARTURES.

Nationality.	Total number.	Number of crew.	Total tonnage.
American	2	12	498
Argentine	18	485	3,930
Brazilian	265	6,278	81,760
British	68	465	12,578
Costa Rican	1	7	230
Danish	31	174	4,771
Dutch	43	258	7,569
French	6	43	1,049
German	50	293	8,353
Italian	6	47	1,020
Norwegian	15	91	2,652
Portuguese	33	254	6,261
Spanish	7	61	890
Swedish	10	61	1,647
Total	555	8,529	133,208

DEPARTURES.

For Brazilian ports	345
For European ports	84
For United States ports	33
For South American ports	92
For West Indian ports	1
Total	555

DESTINATIONS.

Brazilian ports:	
St. Catherine's (including 1 steamer)	4
Paranagua	1
Rio de Janeiro (including 74 steamers, 2 of war)	138
Bahia and Pernambuco	134
Other northern ports	78
Total (including 75 steamers, 2 of war)	355
European ports:	
Amsterdam	1
Bordeaux	1
Channel, for orders	68
Genoa	3
Hamburg	2
Havre	3
Oporto	2
Vigo	2
Western Islands	2
Total	84

	Vessels.
United States ports:	
Boston	10
Hampton Roads, for order	1
New York	6
Sandy Hook, for order	16
Total	33
South American ports:	
Buenos Ayres (including 1 steamer)	7
Montevideo (including 79 steamers, 1 of war)	82
Rio Hacha	1
Valparaiso	2
Total (including 80 steamers, 1 of war)	92

AUSTRIAN EXPORTS TO THE UNITED STATES.

The following statement shows the value of declared exports from the consular districts of Austria-Hungary (agencies included) to the United States of America during the quarter ending June 30, 1882.

Articles.	Budapesth.	Prague.	Trieste.	Vienna.	Total.
Red feathers		$335 35			$335 35
Books		659 33			659 33
Buttons		17,568 27		$243,869 99	261,438 26
Cloth and woolen goods		24,522 95		65,421 47	89,944 42
Dress goods and shawls				4,825 49	4,825 49
Drugs and chemicals	$546 41	3,229 83	$6,396 66	9,248 58	19,421 48
Fancy goods and jewelry		4,416 92		84,247 97	88,664 89
Fans				19,757 31	19,757 31
Fruits, dried	89,632 24		275,000 19	71,411 15	436,643 58
Furniture				11,064 03	11,064 03
Glassware		382,465 50		2,437 61	384,903 11
Gloves				9,610 84	9,610 84
Gum			60,496 94		60,496 94
Hair, human		557 51			557,51
Insect powder			18,687 92		18,687 92
Leather, skins, and furs		16,584 06	23,942 79	46,078 69	86,605 54
Lentils				3,322 76	3,322 76
Linen and cotton goods		1,443 37		106,297 13	107,740 50
Mineral water	16,325 61	6,224 95			22,550 56
Musical instruments		1,438 01		27,349 39	28,787 40
Oils			2,139 70		2,139 70
Pipes and pipe-fixtures				55,264 28	55,264 28
Porcelain and pottery		52,456 39		9,584 51	62,040 90
Rags			4,326 27		4,326 27
Silks and velvets				38,898 60	38,898 60
Sponges			2,759 27		2,759 27
Tartar, crude				68,422 27	68,422 27
Toys		11,692 42			11,692 42
Wine, beer, and liquor	8,808 36	22,652 25		3,967 66	35,428 27
Miscellaneous		7,851 40	54,711 82	25,904 09	88,467 31
Total in United States gold	115,312 62	554,098 51	449,061 56	906,983 82	2,025,456 51
Total for the same quarter, 1881	29,484 26	512,746 05	269,256 39	601,600 58	1,413,087 28
Increase	85,828 36	41,352 36	179,805 17	305,383 24	612,369 23

The average value of the Austrian paper florin during the quarter was equal to 40½ cents.

JAMES RILEY WEAVER,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
Vienna, August 3, 1882.

FRUIT TRADE OF JAMAICA.

REPORT BY CONSUL HOSKINSON.

The year 1868 may be said to have seen the first attempts made in this island to develop the almost spontaneous production of fruit and to create a trade in the article which increasing year by year, has assumed dimensions of such importance as to give it a place beside the long-established staple exports of the colony.

Previously there seems to have been some exports of fruit from Jamaica but of so trifling a character as not to merit any distinct mention in the published returns of the exports of the island; and its inception in that year was mainly due to the enterprise of an American shipmaster, Capt. George Bush, whose business taking him to Port Antonio, a port on north side of the island some 40 miles distant from Morart Point, its easternmost end, and since become its leading fruit port, saw the feasibility of establishing a lucrative business in transporting bananas to the United States, and commenced doing so in small quantities, in which he was followed by others, with a more or less varying degree of success, until 1872, when several of the fine fishing fleet of Cape Cod, in search of profitable employment out of the fishing season, becoming engaged in freighting fruit to be sent to Northern and Southern ports of the United States, and the inauguration of a regular subsidized line of mail steamers between Kingston and New York, gave an impetus to the trade that it has kept steadily increasing each succeeding year. These sailing vessels have been gradually superseded by steamships, though a few still remain in the business. The following is a list of the steam vessels engaged in carrying fruit to the United States, with their average capacities:

From Port Antonio to Philadelphia, the steamer Tropic, D. J. Foley, and Acadia, under the American flag, and having capacity for about 10,000 bunches of bananas each, and making monthly trips; to Ne York, steamers of the Atlas Mail line, twice a month, and having capacity for 8,000 to 10,000 bunches; to New Orleans, the steamer Chose or Lucy P. Miller, under the American flag, and having a capacity of 8,000 bunches, making a trip every three weeks.

From Kingston to New York, steamers of the Atlas Mail Company, twice a month; capacity, 10,000 bunches. To Baltimore, a steamer of the W. I. and P. Company, having capacity for 6,000 or 8,000 bunches over a month, and the steamer Gulnare, of 5,000 bunches' capacity, once a month.

Besides these, the steamers Pomona and Edith Golden, belonging to a local firm, make monthly trips to New York from northside ports, carrying from 5,000 to 8,000 bunches each trip, and the steamers of the North and South American Steamship Company make occasional trips for fruit as freight offers.

The government of the colony have a contract with the Atlas Mail Steamship Company, of Liverpool, for carrying the mails twice a month to New York, and oblige them to reserve 400 tons' space on each trip for freight. This contract was made for the special purpose of encouraging the fruit industry, and while the company performs its obligations in regard to time, it cannot be said that it pays very much attention to the interests of the shippers of perishable commodities, which form the greater part of their cargo each voyage. Much complaint has been and

is made by those interested of their poorly ventilated steamers and of their agents and their employés in general. The steamers come here from Porto Rico, where they take in large cargoes of sugar and molasses, the steam from which arises and is very detrimental to the fruit that they carry in their "between decks." One of their vessels which left here this season thus loaded is said to have almost totally destroyed a large cargo of bananas that were shipped on her. This company receives from the government $2,500 annually, in consideration of their services as described.

CULTIVATION OF THE BANANA.

The banana is an annual, the fruit coming to maturity about a year from the time that the shoot is planted; the trunk of the tree then attaining a height of 8 or 10 feet, and of perhaps 36 inches in girth. From the trunk, which is of a porous, fibrous nature, are thrown out long palm-like branches to the number of half a dozen or more. The bunch of fruit appears at the juncture of the trunk and branches, and consists of 4 to 12 of what are termed "hands," each "hand" having 8 or 10 bananas on it; a bunch of 8 hands being the standard size of shipping fruit. From the root of this tree several shoots or "suckers" sprout, each of which, in turn, becomes a tree and bears a bunch of bananas, or may be transplanted. After the bunch has been cut the tree is usually felled; indeed, the tree is frequently felled to gather the fruit. There are a good many plantations of bananas on the island, varying in size from 25,000 to 200,000 trees, but they are for the most part cultivated by the small settlers in the different parishes, and prove a source of great profit to them. Their plantations usually consist of 3 or 4 acres of land, on which they erect a mud hut, with a thatched roof, in which to live, as they are afraid to leave their grounds to the mercy of their neighbors, who prey upon one another without any regard to age, or sex, or relationship. Strict laws have recently been passed by which this class of offenders are publicly flogged when caught, and will no doubt teach the negroes in this island to be more thrifty and to pay more respect to the laws.

The method of cultivation is exceedingly simple. The land being first cleared by the aid of a primitive and ponderous iron hoe, a hole is dug in which is placed the shoot or "sucker," nature being left to do the rest; and unless the season be one of exceeding drought the tree is certain to grow and to bring forth its fruit in from nine to twelve months afterwards. In well-ordered plantations the trees are usually planted from 12 to 15 feet apart, in the form of squares, and, where irrigation is practicable, trenches are dug between to admit of water being let in as often as possible. Bananas thrive best when planted in damp, cloggy soil, and in districts where rain is plentiful.

No great amount of service or skill is expended in the cultivation of this fruit, nor, so far as I can learn, is anything done to improve its quality or size, the main object seeming to be to get the bunch to the dealer mature or immature, in the hope that it will be purchased, if even at a reduced price.

Reform seems also to be necessary in the method of getting the article to market, not unfrequently a distance of 20 miles, which is at present accomplished by means of clumsy springless drays and carts upon which 30 or 40 bunches are indiscriminately placed with some attempt at wrapping in the dried leaves of the tree, and are chafed and scarred by the wheels of the vehicle and by the weight of the driver, who generally makes a comfortable perch for himself on top of the whole.

These defects do not present themselves until the fruit has been in the ship's hold some days, when they result in unsightly black patches, which naturally do not enhance their value on their arrival at their destination. American flat wagons on springs, on which the fruit could be placed upright, would appear to be the right kind of vehicle in which to transport bananas to market.

The following is a return of the value of bananas exported from Kingston and Port Antonio during the past 6 years, ending June 30 last:

FROM KINGSTON.

1877	$22,101 59
1878	47,065 91
1879	43,762 50
1880	52,549 17
1881 (hurricane year)	12,632 53
1882	56,538 73
Total	234,650 43

FROM PORT ANTONIO.

1877	$45,571 33
1878	89,180 50
1879	68,528 00
1880	134,930 00
1881 (hurricane year)	39,100 00
1882	153,136 60
Total	520,446 43

Considerable quantities of this fruit are also shipped from the ports of Lucca, Montego Bay, St. Ann's Bay, and Port Mara, on the north side of the island. The price rules at about 50 cents per bunch all the year around.

ORANGES.

Of this fruit there are three descriptions—that known as the ordinary orange, which is the orange of commerce; the Seville or sour, which is coarse and bitter, the juice of which is expressed and sent away in small quantities, principally to the United States; and the mandrin, a small red-skined orange, of which variety there is no large quantity.

The increasing demand for oranges in the United States, together with the regular and speedy means of conveyance thither offered, has created a trade that amounts to-day to very respectable proportions.

Two grades of oranges are shipped from the island to the United States—the "ordinary," which is fruit that is plucked and brought to the sea-port to be packed and shipped, and the "stem cut," which comes mostly from the parish of Manchester, and are put up under the trees on the plantations and brought to this port for shipment, a distance of about 60 miles, partly by rail and partly by drays.

In the case of the "stem cuts" care is taken to leave on each orange a small portion of the stem, which apparently has the effect of preserving the fruit, as they always command from $2 to $3 per barrel more in New York than the ordinary orange. This may be attributable also to the fact that the shipments of this kind of orange are for the most part proprietary, and are put up with more care than those shipped from Kingston, which are generally on orders from dealers in New York, and are packed in a most indifferent manner. This fruit is brought in several miles to this city in carts holding from 4,000 to 6,000, and spread out on the ground over night to dry, and then wiped with a dry cloth, and wrapped in paper and packed in barrels or boxes, which are ventilated

by means of holes cut in their sides and tops. Women are employed in the packing, and receive the not very exorbitant remuneration of 18 cents for every thousand oranges so wrapped. The scene in one of these packing houses is a novel one to the stranger, and is not calculated to impress one accustomed to witness the orderly and silent proceedings of manufactories that employ large numbers of people in the United States and Europe with much respect for the intelligence of the native black laboring man or woman of Jamaica. Between the wrangling of the man who brings his fruit for sale and the superintendent of these establishments, and the thousand and one discordant laughs, yells, and songs of the wrapper, you can with difficulty hear yourself speak, and you experience a sense of relief on emerging from the place. No objection seems to be made to those employed consuming as much of the fruit as they please, for they may be seen at all times either peeling or eating an orange.

Not an uncommon sight, after the barrel has been filled with fruit and heaped up pyramidal shape, preparatory to its being headed up, is to see one of the "dusky maidens" place a flat piece of board on top and throw her whole weight in a sitting posture on it for the purpose of squeezing down the contents of the barrel. This operation, I need hardly say, has the effect of reducing the upper portion of the oranges in the barrel to a pulp.

It is submitted by those capable of forming an opinion that not more than one-fourth of the oranges raised in the island are brought to market, owing to the inaccessibility of the places where they are grown and the want of proper means of transportation. These drawbacks will in some measure be counteracted by the railroad at present being built by the government, which will go through and near the orange-producing districts, and to be finished in two years.

The ordinary oranges are worth about $7, and the stem-cut about $9 per M, including cost of barrels or boxes, paper wrappings, &c., for the season, commencing in September and ending in March.

Small quantities of the peel of the orange are exported to the United States and used for flavoring purposes. The following is a return of the values of oranges shipped to the United States from Kingston during the six years ending June 30 last, 1877:

1877	$27,987 76
1878	29,486 50
1879	41,683 19
1880	50,940 98
1881	85,185 01
1882	194,291 58
Total	429,575 02

Quite large quantities have also been sent from the other parts of the island, notably those on the north side, and perhaps aggregate as much as that shipped from Kingston.

COCOANUTS

are exported to some extent, principally from Port Antonio. A destructive hurricane which passed over the island in the month of August, 1880, destroyed a large number of trees, accounting for the decrease in the quantities exported in 1881 and 1882, and also for the decrease in bananas exported in 1881; it does not seem to have affected the orange crop, judging from the quantity exported in the year that it took place, which is, in fact, larger than in the previous years, and this is doubtless owing to

the oranges having matured on the trees before the hurricane came. Cocoanuts may be bought for $20 per thousand; a good many being sent to England in the mest, where that portion is used in the manufacture of brooms, brushes, mats, and articles of like nature; those that go to the United States are clean-husked. The following is a return of cocoanuts shipped from Port Antonio to the United States during the past six years, ending June 30 last:

1877	$11,620 00
1878	20,645 00
1879	19,150 00
1880	61,620 00
1881 (hurricane year)	17,610 00
1882	17,899 60
Total	148,544 60

MINOR FRUIT EXPORTS.

Limes, pine-apples, mangoes, and other less known descriptions of tropical fruit, as well as the juice of the lime, which is expressed and reduced by boiling to a consistency of one to five (then called citric acid) are being shipped in small quantities to the United States, and will doubtless increase as they become better known.

The mango, now perhaps the most common fruit in Jamaica, is of comparatively recent introduction, having been brought here by Captain Marshall, of Lord Rodney's squadron, from the East Indies, in 1782, and was first planted in a private garden back of Kingston, and thence spread all over the island. It is the popular fruit for the native, forming, indeed, during the months of June, July, and August, his mainstay of subsistence. There are said to be more than a hundred kinds of this fruit alone; but this I am inclined to doubt, though it is certain that there are a great many varieties. Following is a return of the values of limes and pine-apples exported to the United States during the two years ended January 30 last:

Year.	Limes.	Pine-apples.
1881	$1,284 80	$1,450 50
1882	2,556 54	8,382 11
Total	3,841 34	9,832 61

The following is a return of the values of fruit exported from all parts of the island to all countries from 1877 to 1881 inclusive. Of the total quantities about 99 per cent. went to the United States. The figures are taken from the published returns of the government, and as they represent the actual values of the fruit may show a difference of say 15 per cent. from the returns of this consulate which have regard to the charges on the fruit exports:

1877	$766
1878	192,016
1879	195,468
1880	249,719
1881 (hurricane year)	215,171
Total	961,140

GEO. E. HOSKINSON,
Consul.

UNITED STATES CONSULATE,
Kingston, Jamaica, July 24, 1882.

INDUSTRIES AND MANUFACTURES OF ST. ÉTIENNE.

REPORT BY CONSULAR AGENT HERTZBERG.

INTRODUCTORY.

Within the last three or four years cotton yarns have entered largely into the ribbon manufacture; so much so that they discharge to-day almost as important a part for that branch of business as the silk thread does, the quantity of mixed goods of St. Étienne extraction amounting to more than one-third of its entire production. Now the French tariff, in order to protect the cotton-yarn spinners of the north of France against English and American competition, put so high a rate of import duty on foreign cotton yarns that the St. Étienne manufacturer, paying a duty of 490 francs for the same yarns for which his Swiss rival has to pay the inconsiderable sum of 4 francs, and the German fabricant about double that amount, would have been long since entirely precluded from any competition with Bâle, Crefeld, and Barmen mixed ribbon-goods but for the fact that the traditional superiority of French taste and skill and a more economical management of the St. Étienne fabrication did, to some extent at least, counterbalance the injurious consequences of a disastrous legislation. Still, the fight remains an almost desperate one. Time may improve Swiss and German skill and tastes, and manufacturing expenses are liable to be reduced by experience. At all events, the question of having the disproportionally high duty on cotton yarns reasonably abated is of vital importance to the ribbon industry of St. Étienne. Only by securing a favorable solution for that question it will be possible to bring back to this place the foreign buyer and costumer of old, now extensively going to Bâle or Crefeld for the mixed ribbon goods, on account of its greater cheapness, inferior in quality as they are.

It was with this object in view, and for the purpose of collecting statistical material showing up by authoritative, indisputable figures the importance of the ribbon industry of St. Étienne, so seriously imperiled by an injurious tariff, and of thereby securing governmental assistance, that the before-mentioned association, the *Chambre syndicale des tissus et matières textiles*, proceeded in the beginning of this year to take a kind of a private census of the St. Étienne ribbon production of 1881 by inviting every fabricant to write down on printed forms, prepared for that end, the amount, quality, &c., of the ribbon goods produced through his agency and under his control (these bulletins not to be signed, and so to be of a strictly confidential character), and to deposit the same in a locked-up box, expressly constructed for that purpose. The result of that registration is a statistical table exhibiting the amount of the entire production of the "Rubanerie Stéphanoise" for the calendar year of 1881, not published before the beginning of this month, the only document of that description which can pretend to be considered as of an official nature, and which to incorporate into my report I had to delay the writing and transmitting of this dispatch up to this rather late period, which is, however, still within the limits of time allowed by law.

So much for the introduction needed; now to the report itself.

The principal industries of the consular district of St. Étienne, comprising the departments of the Loire, Haute-Loire, Isère, Puy-de-Dôme, and the arrondissement of Tarare, are: 1, the mining industry of Loire

and Isère; 2, the metallurgical industry of the same departments; 3, the manufacture of arms of St. Étienne and its environs; 4, the manufacture of ribbons of St. Étienne; 5, the manufacture of laces, tulles, &c., of Le Puy and environs; 6, the manufacture of kid gloves of Grenoble; 7, the manufacture of cotton goods, tarlatans, &c., of Tarare. I propose to take up and treat these industries in succession.

MINING.

Although the discovery of coal beds in the region at present comprised within the boundaries of the Loire department reaches as far down as to the remote age of the Roman occupation, the professional exploitation of that valuable source of wealth is of a comparatively modern date. As legendary tradition has it, the first coal mines were started in the neighborhood of Rive-de-Gier about the year 1400, but up to the seventeenth century they worked only to a small extent so as to supply the inconsiderable local wants. The first historical record as to an exportation of the Rive-de-Gier coal to Lyons, Givors, Vienne, and Condrieu, for industrial purposes probably, points not farther back than to the year 1750. At that period the method of transporting coals was to carry them on clumsy country wagons of small capacity, drawn by mules and on mule-back, and in connection with that fact it is mentioned that 700 mules were employed for this service. The discovery and exploitation of the second principal coal basin within the Loire department at Ricamarie, Bérandière, &c., near St. Étienne (from which latter city it took its name) are of a still more recent date. In spite of the great extension and richness of both of these basins the progress of mining remained, previously to 1800, a very slow one, and it was only with the commencement of the present century that a new era commenced for the development of the coal-mining industry of the Loire. A few statistical figures may suffice to characterize the progress made since that period.

In 1812 there were in operation in the districts of St. Étienne and St. Chamond 43 collieries, employing 541 miners, extracting 105,027 tons; in the Rive-de-Gier district, 30 collieries, employing 884 miners, extracting 187,351 tons.

In 1817 the production of the St. Étienne basin amounted to 154,548 tons, and that of the Rive-de-Gier basin to 217,500 tons.

From that time up to the year 1823 the average yield in the two districts kept within the limits of from 300,000 to 400,000 tons a year.

A disastrous change in the French mining legislation intervening in 1824, and the financial troubles resulting therefrom, had so bad and injurious an effect on the progress of mining operations that the coal production of the two districts in 1832 of 634,243 tons shows, for a space of eight years, the unimportant increase of about 22 per cent. Indeed the calamitous consequences of the disturbances were sadly felt during a long period, keeping back the development of the Loire mines upwards to the year 1855, which inaugurated an era of undisturbed prosperity and regularity in the mining operations of that district.

In 1864 the harvest yield on both of the Loire coal-fields exceeded already 3,000,000 of tons; but it was due only to the wonderful energy manifesting itself in the glorious revival of the French industries, after the Franco-German war of 1870, that a full development of the mining capacities of the Loire districts could be secured. As stated in my former report (dispatch No. 38), of the six coal-bearing districts of the French Republic, the department of the Loire is to-day only second in

importance to the famous banner district of the north. The following table, taken from the "Annuaire du département de la Loire" for 1882, published under the auspices of the government, shows the production of the Loire mines from 1870 to 1880 with the exception of 1876. This official document fails to give the yield of 1881; it is to be presumed, however, that it exceeds even that of the year 1873, coming near to the amount of 4,000,000 tons, if not reaching that figure. The production was as follows:

	Tons.
1870	3,347,257
1871	3,136,528
1872	3,488,748
1873	3,855,880
1874	3,462,688
1875	3,276,351
1877	3,304,302
1878	3,177,760
1879	3,050,177
1880	3,542,129

The coal beds of the Isère department, situate in the neighborhood of Vienne, the old capital of the renowned Dauphine, are properly belonging to and really forming part of the Rive-de-Gier basin, which, after traversing the river Rhone, extends into the territory of the Isère, and its production is of a comparatively small importance.

As the demand for coal, always dependent on the wants of the metallurgical industry, has, during the whole year of 1881, been a very brisk one, at prices firm and satisfactory, at the same time the mining branch of the Loire and Isère may be said to have enjoyed a pretty fair prosperity; the hands employed therein had, without any interruption, full work, earning good wages, and strikes, therefore, were a "thing unknown" within this consular district.

METALLURGY.

As regards the condition of the French metallurgy, the year 1881 may be classed among the most exceptional, its prosperity being of a solid nature, free from excesses, both to prices and production, and, as I may justly add, the consular district of St. Étienne had its due share in that general prosperity of the branch.

On the whole, the year of 1881 showed a continual tendency to a slight but uninterrupted rise for every article of the metallurgical products, ordinary iron, rails, steel, &c.

For a year of prosperity, active working, and pressure, of orders, it is a characteristic feature that the technical progress uses to be insignificant, and hardly illustrated by startling discoveries or processes of entire novelty. As long as an industry is reaping an easy harvest of money by an uninterrupted and fairly profitable business, its managers, engineers, &c., find no time to spare for researches, experiments, and technical or scientific labors; only under the pressure of hard times the "struggle for existence" gives the necessary incitement to imaginative inventions.

The year 1881, as well as its predecessor, enjoying also a tolerably fair business prosperity in its metallurgical branch, shows no exception to that rule. But if these two years are not conspicuous by important metallurgical inventions, they have been rather remarkable for the numerous erections of new plants, almost every one of the French metallurgical establishments being unable to meet the pressing wants, and therefore seeing itself placed under the necessity of enlarging its works in propor-

tion to these wants. Of the new enterprises and the additions to the old ones during 1880 and 1881 that belong to this district, I beg to mention the following:

At the railway and marine works of St. Chamond, a gigantic lathe of 100 tons weight has been set up for the boring of naval guns. This lathe, together with the hammer of 100 tons, completes the plants for making this class of heavy ordnance. At Rive-de-Gier, Mr. Brunon, whose manufacture of railway wheels is well known, has studied a system of new sleepers of stamped steel plates, for the fabrication of which he has set up new machinery. The Firminy steel works, in order to meet the considerable demand for steel of small sections, have set up a wire-drawing mill, in which all kinds of wire are made. The St. Étienne steel works, renowned for the excellence of its manufacture of plates, have considerably enlarged its manufacturing capacities. Messrs. Russery & Verdie, of Lorette, have laid out a new steel manufactory, especially for making steel for wire, and of high quality for tools, &c. These new works consist of a crucible foundry (Siemens system), five puddling furnaces, three rolling mills, &c. There are now in course of construction and nearly completed at St. Étienne two large plants, one especially for railway carriages and trucks of every description, and the other for locomotives, tenders, and boilers. The principal cause for the erection of these works, as well as of others of the same kind (as Raismes, for instance), was that the year 1881 having been one of extraordinary prosperity to the French railway companies, the want of rolling stock had been severely felt. As the plants devoted to that special manufacture were utterly unable to meet these pressing wants, a large quantity had to be ordered abroad. The value of these foreign commands is estimated at about $10,000,000. It has also been calculated that, if the so-called Freycinet schemes are to be carried into execution, France would need 882 locomotives per year, while the existing establishments are hardly able to produce more than 419 engines, a deficiency which naturally suggested the creation of new works.

I regret my inability to lay before you the statistical figures evidencing the metallurgical prosperity of the two last years, as the official documents at my disposal give only the results for the year 1880. In that year the total output of the French metallurgy amounted to 3,070,036 tons, in which the Loire and Isère participated with 307,480, a little more than one-tenth of the entire production, as shown by the following table:

Description.	Loire.	Isère.
	Tons.	*Tons.*
Pig:		
Forge	60,800	35,528
Foundry	252	941
Total	61,052	36,469
Iron:		
Rails	93	109
Merchant and profile	54,832	10,129
Plates	19,812	879
Total	74,737	11,157
Steel:		
Rails	68,245	.....
Merchant	39,348	8,317
Plates	7,655	.....
Total	115,748	8,317

Aggregate, 307,480 tons.

Agreeably to an estimate of Mr. Francis Laur, civil engineer of mines in this city, and well known in French metallurgical circles as a scientific writer and competent judge about these matters, I shall, by the statistics still to be published, be borne out in the assertion that the metallurgical production of this consular district for 1881 is in excess of that of the preceding year by at least 25 per cent.

MANUFACTURE OF ARMS

is a very old branch of industry, and deservedly noted for the superiority of its produce, as more minutely detailed in my former report. It is the more to be regretted that exact statistical data and figures showing its total production cannot be obtained. No official documents whatever have been published which might enable me to state, even approximately, the value of its fabrication during the year of 1881. So I must needs limit my remarks to what I was able to learn from rather arbitrary estimates.

The government factory, "Manufacture nationale d'armes de guerre," exclusively established, as its name indicates, for the purpose of furnishing weapons for the French army, had during 1881 its working force largely reduced, the number of hands employed averaging from 3,000 to 4,000, and the wages, varying in accordance to the kind of skill needed, were likewise greatly reduced. As a matter of course, during the period subsequent to the war, while the process of reconstructing the army and of resupplying its arsenals went on, a kind of a beehive activity was prevailing in the workshops of the government establishment. at some times a force of over 8,000 hands being at work and finishing more than 1,000 army guns per day. The highest point of production was reached in 1878, resulting in the manufacturing of 440,000 arms. Since that time it has gradually decreased to its present status.

As to the condition of the private branch of this industry, having for its special object the fabrication of "armes de luxe," such as hunting guns, fancy pistols and revolvers, &c., and enjoying a high reputation for the traditional exquisitness and superior style of its work, I feel justified to state, on good authority, that its trade during the year of 1881 has continued to be, in a rather quiet way, prosperous and satisfactory, although it seems to become more and more limited to merely supplying the wants of the home market, as the exportation of French arms of luxe to the other European countries and to the United States has almost entirely ceased, on account of the marked improvements in that line in those countries. The number of from 80,000 to 90,000 pieces of arms given in my last report as approximating the quantity furnished by the private armorer shops of this city and its environs during the preceding year may be considered as likewise holding good for 1881.

THE RUBANERIE OF ST. ÉTIENNE.

Regarding the general condition of this industry during the calendar year of 1881, I am sorry to state that the business prostration which prevailed in 1880 has not only continued, but taken even greater and wider proportions in 1881. The fears already entertained at the time of my former report that the high protective and almost prohibitory tariff of the German Empire, in force since January, 1880, might succeed in sweeping entirely from the German market the St. Étienne ribbon ware, even those articles of superior quality and taste that in former years were so eagerly coveted by the German customer, have been only

too sadly verified, not to speak of the common class of the mixed ribbon goods which, on account of the high import duty imposed on cotton yarns by the French tariff, can be at a lower cost manufactured by the German ribbon makers. To illustrate the heavy loss caused by that exclusion of St. Étienne from the German market, I may state here that several of the chiefs of the most important commission houses in this city, which, up to 1880, used to do a yearly business with their German customers amounting to a quarter of a million of francs, have repeatedly assured me that in 1881 their German trade has so dreadfully fallen off as to be at the present day almost of no account whatever. And the sales on the other European markets, as well as to the United States, as I am informed by thoroughly reliable business men, have been far from anything like satisfactory to such a degree as to make up for that loss of the former German custom. While I have no means to verify this statement, at least not for the European markets, simply because there do not exist any statistics showing the exact figures of the St. Étienne exportation to these markets, I am able to prove its correctness as far as the exports to the United States are concerned. The total value of the exports of the St. Étienne rubanerie, which, according to the French acceptation of the word, includes trimmings, braids, &c., amounted in 1880 to $928,544.09, while for the subsequent year of 1881 it only amounted to the sum of $715,491.69, showing a decrease of $213,052.40, or nearly 23 per cent.

In what proportion this loss of $213,052.40 distributes itself among the different articles of the ribbon branch the following table shows:

Articles.	1880.	1881.	Decrease.	Increase.
Silk ribbons	$740,517 52	$643,335 63	$97,181 89=13 per cent.	
Velvet ribbons	73,337 65	17,732 52	55,601 13=75 per cent.	
Elastic ribbons	2,663 85	2,003 60	260 65=11½ per cent.	
Cravats	103,051 95	41,484 81	61,567 14=60 per cent.	
Trimmings	9,373 12	10,935 13		$1,562 14=14 per cent.
Total	928,544 09	715,491 69		

The decrease of 13 per cent. in the American importation of St. Étienne silk and mixed ribbon goods, not so very heavy in itself, may be easily accounted for by the increased home manufacture, the further development of which must, in due course of time, necessarily result in finally reducing the St. Étienne exportation to a minimum, and confining the same to only the finest and most exquisite class, the so-called façonné ribbons, for which the demand of the American market may for a considerable space of time still remain dependent on French taste and skill. Although the statistics of the American home manufacture of ribbons are not at my command, so as to justify me to speak positively, I venture to assert that the falling off in the export of the St. Étienne silk ribbons in 1881 is only corresponding to the increased productiveness and production of the American mills.

As to the more heavy and injurious losses which during the year of 1881 the St. Étienne export trade had to undergo in the lines of velvet ribbons and ladies' cravats, amounting to 75 per cent. and 60 per cent. respectively, the cause is quite a different one. Like all the products of the "Rubanerie Stéphanoise," these two articles belong to the domain of Queen Mode, and that dame, always rather capricious in her moods and liable to sudden changes in her tastes and dictates, has of late banished from the kingdom of fashion the velvet ribbon as well as the

ladies' cravat, both of which had for a long period kept so prominent and conspicuous a place under her rule. And especially the disgrace under which the cravat temporarily suffers all over the world of mode has had a very damaging effect on the St. Étienne industry. Ever since 1873 the manufacturing of ladies' ties had been, I might say, the ruling branch of the rubanerie of this place; many of the weavers are exclusively accustomed to and skilled in that line of work, and not a few of the looms had been expressly constructed for and adapted to the purpose of producing cravats. Everybody who knows what European conservativism and traditional adherence to a certain mode of working means knows at the same time how difficult, if not impossible, it is for a European workingman to change and suddenly conform himself to a new kind of work, and manner of working. French workingmen are just as slow to adopt new methods, and just as tenacious of their old-fashioned ways and habits of working, as the rest of European mechanics, and so the result of Dame Mode's last caprice interdicting the "cravat" is to be seen here in hundreds of hands unemployed and in a large number of looms deserted.

The elastic ribbon, another produce of the St. Étienne "rubanerie" of minor importance, has shared in the loss of the year 1881 in about the same proportion as the silk and mixed ribbon, while the above-given table shows that the last article of the list, in the fabrication of which the neighboring city of St. Chamond largely participates, has even gained a little in 1881 over the exports of the preceding year.

The second table inclosed herewith and marked B, which I have compiled from the statistics collected and published by the *Chambre Syndicale des tissus et des matiéres textiles*, a short time ago, shows the total value of the production of the Rubanerie Stéphanoise for the year 1881 to be $12,016,118.40, of which total production St. Étienne articles to the amount of $5,102,999 have been exported to the different countries of Europe and America. The United States having received thereof to the value of $715,401.99, her participation in the export trade of the St. Étienne ribbon industry amounts to a little more than 14 per cent.

It is a statistical fact that of all the articles manufactured here in 1881 in the ribbon line one-third belongs to the class of mixed goods, thereby evidencing the important place which the cotton thread to-day occupies in this branch of industry, a fact the more interesting to our country as it indicates how promising a field a French tariff less prohibitory than the present one might open to the introduction of American cotton yarns.

The total production of the Rubanerie Stéphanoise for a long period previous to 1881 was estimated, by almost general consent, as amounting to a value of 80,000,000 francs, or $15,500,000, an estimate, however, not based on authentical figures, and therefore approximative only in its character.

The ribbon production for 1881, showing a value of little more than $12,000,000, might therefore, on a fair construction of its figures, be taken as confirmatory of the fact that the ribbon industry of St. Étienne since the end of 1880 shows a decrease of nearly 29 per cent.

If this decreasing tendency continues—and there is every reason to believe that such will be the case—and if in natural sequence thereof the already poor wages of the workingman (averaging from 40 to 60 cents, at the highest, for a day's work of eleven to twelve hours) will be correspondingly reduced, until reaching an almost starving rate, it is not improbable that many of the St. Étienne ribbon weavers, especially

the more energetic and intelligent ones among that class, may, in spite of the notorious fact that Frenchmen only reluctantly leave their native land, be forced to look out for new homes in our country, promising them plentiful work and an abundant compensation for labor, and that they may so become instrumental in the more rapid development of the rising American ribbon manufacture, accelerating thereby the downward course of the St. Étienne industry. The ever-increasing number of persons coming of late to this office for information about America and Paterson seems to point in that direction.

Another sign of the times, illustrative of the severe depression from which the rubanerie suffers, and to which my report for 1880 has already alluded, is the increasing ratio of business failures in that branch, as well as of firms closing up voluntarily their old trades on account of failure to pay any longer. Advertisements of forced sales, by the courts, of looms, manufacturing materials, &c., and offers for a voluntary disposal of such in the city papers are of almost daily occurrence. And finally, the last financial crash, affecting not only the big fortunes of the manufacturing capitalists, but also to a considerable extent the small economies of the laboring class (deposited in the coffers of the Union générale), has contributed to making bad worse, and the general calamity still more generally and more keenly felt.

AMERICAN TRADE AT ST. ÉTIENNE.

It is not within my power to inclose a table of American imports to this consular district, as required by the regulations. This being an inland district, far away from the seaports where American goods are landed and registered by the custom-houses, it would be altogether next to impossible to ascertain what amount of articles of American production is brought to it. But, to judge from an observation of nearly three years, I feel justified to state that in all the cities of this district, and especially at St. Étienne, there does not exist an importation of American goods worthy to speak of.

Not to expatiate on the animosity deeply rooted in the French mind against everything foreign, and especially American, I may give it as reason for that fact that all the necessaries of life the manufacturing centers of this district stand in need of are amply provided for by home production. The territory of the St. Étienne consular district comprises a very large area of arable lands situate in the fertile plains of Roanne and the Forez, and in the rich and mostly irrigable valleys of the Haute-Loire and Isère departments, all of them famous for cereal and vegetable production. There are also within its limits extended tracts of grazing country fully sufficient not only to raise the cattle and supply the butter, cheese, &c., needed in the district itself, but to export beeves and the named articles of husbandry to other parts of France. Besides, oak forests of great extension in the mountainous sections of the district secure a crop of pork and lard for it. The supply of preserved fruits, such as tomatoes, plums, cherries, &c., comes from the well-known factories of Clermont-Ferrand, in the department of Puy-de-Dôme, belonging to the district. To be short, almost the only articles of foreign extraction worth mentioning that I have found represented here are the York and Strassburg hams and the Strassburg sourkrout, the latter even hardly to be considered as foreign.

Articles of American manufacture and industry are, as far as I can learn from trustworthy information as well as by my own observation, not to be found in this district, neither those belonging to the textile

line nor any agricultural implements and specimens of the justly celebrated hardware branch; it was even impossible for me, as I may mention in this connection, to find in one of the many hardware stores of this great city an American hatchet. As the merchants stated, the prices of American hardware articles—the superiority of which is generally acknowledged here—would, in consequence of the import duty, be too high to guarantee a profitable sale.

As to American cotton, the only article belonging to the class of raw materials needed in this district by the Tarare, Roanne, &c., mills, I beg to say, in conclusion, that I hope to have next fall, when Vice-Commercial Agent Edw. F. Hertzberg will be here, an opportunity for visiting those mills and ascertaining by personal investigation into the matter, the amount and value of its importation.

THEODORE HERTZBERG,
Commercial Agent.

UNITED STATES COMMERCIAL AGENCY,
St. Étienne, France, June 3, 1882.

TRADE BETWEEN CARDENAS AND THE UNITED STATES.

REPORT BY COMMERCIAL AGENT NUNEZ.

It is a conceded fact that nine-tenths of the exports of the island of Cuba are shipped to the United States, but a very much smaller percentage is transported in American bottoms. The relative value of exports from this port to the United States for the past three years and a half is as follows:

1879.	In American vessels	$6,390,736 10
	In foreign vessels	1,497,542 66
		7,888,278 66
1880.	In American vessels	9,167,592 79
	In foreign vessels	1,127,293 83
1881.	In American vessels	6,029,111 65
	In foreign vessels	3,230,626 90
		9,259,736 77
1882.	(To June 20) in American vessels	7,329,921 60
	(To June 20) in foreign vessels	3,110,212 56
		10,440,134 16

The number of vessels carrying this freight from Cardenas to the United States is as follows:

1879.	American vessels	309
	Foreign vessels (nearly all English)	61
1880.	American vessels	196
	Foreign vessels (nearly all English)	55
1881.	American vessels	205
	Foreign vessels (nearly all English)	71
1882.	(To June 30) American	151
	(To June 30) Foreign	63
Total number clearing from January 1, 1879, to June 30, 1882:		
	American	861
	Foreign	250
		1,111

The export tonnage in English bottoms is on the increase, for the reason that the English vessels are generally steamers carrying heavy freight, and at less rates than American vessels can afford to charter for.

It may not here be inappropriate to suggest that, in the future development of this island's resources, the impetus given to American trade will be very great, particularly the coast trade, which will probably be carried in American bottoms.

A growing article of export from Cardenas is asphaltum, and it is claimed that the Cardenas asphaltum is superior to that of any other part of the world. There is much asphaltum in the island of Cuba; much of it is of questionable quality and is called *chapapote*, but that which is obtained at this port is dredged from the bed of the bay, and at upwards of sixty feet below the surface of the water and is supposed to be inexhaustible. The quantity shipped from this port since January 1, 1879, and the invoice price per ton is as follows: Quantity, a fraction over 1,422 tons, and at an average price of $30 per ton.

The sugar crop in this vicinity up to this time is very promising and is expected to exceed that of former years, as, besides the favorable weather, much new land has this year been brought under cultivation.

JOSEPH A. NUNEZ,
Commercial Agent.

UNITED STATES COMMERCIAL AGENCY,
Cardenas, July 20, 1882.

AMERICAN CEREALS AND COTTON AT ROTTERDAM.

REPORT BY CONSUL WINTER.

According to different reports in the newspapers of this district, the crop prospects for 1882 are very favorable, especially for wheat and grass. The following statement gives information as to the trade of Rotterdam with the United States in grain and cotton for 1881:

GRAIN.

Wheat.—Although the quantities imported from all countries were nearly equal to those of the preceding year, the importations from the United States fell off considerably owing to the high prices kept up in the United States by speculators, and to the important supplies from British India.

Calcutta wheat, which some years ago did not find a profitable market here, found in 1881 ready buyers not only in this port, but in all continental markets, so that American shippers will in future have to compete with Indian and even Australian wheat. Red winter wheat was sold at the close of the year at $1.65 per bushel.

The arrivals from the United States amounted to 3,160,300 bushels in 1881 against 5,019,500 bushels in 1880 and 2,490,200 bushels in 1879. The stocks consisted on the 1st of January, 1882, of 370,900 bushels.

Rye.—The importations of this article are gradually declining on account of its high price in comparison with wheat. The normal difference in the respective prices must be re-established before this article may be said to have returned to a settled position. The closing price

for the year 1881 was $1.10 per bushel for fair quality of North American rye,

The imports from the United States were 532,500 bushels in 1881 against 654,750 bushels in 1880 and 1,178,700 bushels in 1879. The stocks on the 1st of January, 1882, amounted to 110,750 bushels.

Maize is steadily making its way as a regular breadstuff as well as for food of animals and for distillery purposes. The high price for maize is chiefly owing to the excessive rates prevailing for rye; should the latter article come down to a normal figure, the presumption of lower prices for maize would not be very hazardous. The prices from the United States are very high, and only the competition of the Black Sea and Danube prevent exaggerated prices. The year closed at $0.80 per bushel.

Flour.—In the beginning of 1881 quietness was the prevailing feature on this market, and during the year only the prices of prime qualities have maintained themselves. Large quantities of second quality American flour have been thrown on this market, which caused prices to recede.

COTTON.

On account of the favorable situation of this port to supply Germany and other countries, this market had a good share of the continental imports. Prices declined a little in the beginning of the year in consequence of the large receipts in American ports and the excessive crop accounts. Afterwards prices ruled very firm, and, though only a little business was done in the last quarter, closed at the same figures as in 1880.

The following statement shows the imports, sales and exports, and stocks in Holland for the two last years:

	Imports.		Sales and exports.		Stock.	
	1880.	1881.	1880.	1881.	1880.	1881.
	Bales.	*Bales.*	*Bales.*	*Bales.*	*Bales.*	*Bales.*
North American	82,375	96,289	99,812	96,634	6,943	6,598
East Indian	65,378	69,409	70,629	67,358	3,549	5,600
Other kinds	207	1,450	186	1,481	31	.....
Total	147,970	167,148	170,627	165,473	10,523	12,198

JNO. F. WINTER,
Consul.

UNITED STATES CONSULATE,
Rotterdam, July 13, 1882.

THE ONTARIO HARVEST.

REPORT BY CONSUL LELAND, OF HAMILTON.

I have the honor to report that the prospect of an abundant harvest in the province of Ontario for the present year is excellent. Wheat, barley, oats, and rye never promised better than at this time, and while corn is backward and the yield will be light, and the clover crop nearly

a failure, owing to early frost and the cold season, the pea and timothy crops are fairly good. The luxuriant growth of waving fields of wheat, barley, and oats is noticeable on every hand in passing through the country. The heavy rains early in the season benefited all growing crops except clover and corn. The fruit crop has been seriously injured by the cold season in many portions of Ontario, and the peach crop will be nearly a failure, but in the eastern portion of the province the apple crop promises well. The total area of wheat sown in the province of Ontario in 1882 is 1,763,876 acres, and the estimated product is 30,783,683 bushels. Two-thirds of the entire wheat crop of the province is winter wheat. The prospective yield is better than an average. The table inclosed herewith, copied from the Toronto Globe, gives an accurate and concise estimate of acreage and aggregate amount of cereals grown in the province of Ontario in 1882.

FRANK LELAND,
Consul.

UNITED STATES CONSULATE,
Hamilton, Ontario, July 19, 1882.

Table showing the number of acres of cereals and the aggregate product of the same in the province of Ontario, Canada, for the year 1882.

CEREALS.

Description.	Area of crops.	Estimated produce.
	Acres.	*Bushels.*
Fall wheat	1,179,284	21,737,341
Spring wheat	591,592	9,046,343
Barley	835,466	20,141,502
Oats	1,425,948	41,650,764
Rye	182,968	2,649,750
Peasc	554,464	10,649,567
Corn	210,080	.....

WOOL.

	Number of fleeces.	Pounds.
Coarse wool	916,433	4,740,617
Fine wool	174,174	877,674

IRON SHIP-BUILDING IN GERMANY.

REPORT BY CONSUL LINCOLN, OF STETTIN, ON THE LAUNCH OF AN IRON-CLAD CORVETTE FOR THE CHINESE NAVY.

I have the honor to report that I was present at the recent launching of the first iron-clad corvette constructed for the Chinese navy, at the works of the "Vulcan."

The ceremony of naming the vessel was performed by the Chinese ambassador, Le Fong Pao, in the presence of the chief of the admiralty, von Stosch, the state secretary, von Bötticher, and a large number of prominent naval, military, and civil officials.

Immediately preceding the departure of the vessel from her stays the Chinese ambassador delivered a christening speech, substantially as follows:

On this happy day of the eighth of the eleventh moon, in the seventh year of the Kwangsu reign, I stand here by supreme command for the purpose of naming this first iron-plated man-of-war of the Chinese navy, and to launch it. It is owing to confidence in the unexcelled science and art of the great German nation that the grand iron structure standing before us has been executed in this country. It is in consciousness of the worthiness of imitation of the imperial German navy that has so admirably solved the problem of a powerful battle ship of light draught that the choice of my government fell upon this model of vessel. It is finally in reliance on the renowned and well-proven capacity of the "Vulcan" that the construction of this work takes place at this establishment.

In thee, O proud ship, are embodied the wishes of the greatest nation of the Asiatic continent, which aim after the restoration of peace at home and the redemption of the old borders of the empire, to obtain the means through which the glorious inheritance of the Ta Tsing dynasty may be secured to it. The sense of the Chinese people inclined to pacific culture recognizes in your type of construction, which limits you in your aims, a new proof, for you are not intended to carry war into distant regions and devastate the shores of the enemy, but your armored turrets shall secure also to the Chinese Empire the same rights which the independent civilized states of the present age mutually accord. May you always be manned by faithful subjects whose sense of duty is as powerful as your iron sides.

As knowledge has taught your architect to frame your structure according to the laws of nature, and to balance you, O, gallant Colossus, with the uncertain element, so may knowledge always be the guide of your commanders in the struggle with wind and waves, and in the encounter with the enemy.

Imploring the high Heavens that you may realize all the bright expectations which exalt us to-day on this occasion, I deliver you to the water, and by order of my sovereign, I name you "Ting Yuen" (Everlasting Peace).

The "Everlasting Peace" is an iron-clad turret frigate of the first rank, and is a case-mated vessel with compound armor of steel and iron. The armor of the casemate, along the water line, is of 15-inch compound steel and iron, laid upon teak of the same thickness.

Both the turrets are located on the forward deck, and are furnished with an armor of 12-inch compound plates, and are so constructed that the four 30½-centimeter guns placed in them can deliver simultaneous broadsides.

At both bow and stern is placed a 15-centimeter gun, besides which on the deck are located two landing guns and six Hotchkiss cannon. The entire armament is furnished by Krupp, in Essen.

The measurements of the ship are as follows:

Length between perpendiculars	meters..	91
Breadth in the widest part	do....	18.3
Depth of hold	do....	7.4
Draught with full armament	do....	6
Displacement, about	tons..	7,400

The twin screws are worked by separate engines, each of 3,000 indicated horse-power, which will enable the vessel to steam 14½ knots.

The work on the corvette was commenced in the middle of last February, and the keel laid on the 21st of March last. It is regarded as quite an achievement that the ship was ready for launching at so early a day.

In conclusion I would venture to remark that the language used by me in a previous report, containing some observations upon the work of the "Vulcan," was intended to contrast simply the *appearance* of the workmanship with that of the American mechanic, and not to criticise the intrinsic merits of the same nor to imply any faults of construction. Since my first visit to the establishment several opportunities have been afforded me of inspecting work in progress and vessels constructed there, and I have every reason to believe that the best of material en-

ters into their construction, and that the utmost diligence is exercised to turn out work in every respect equal to any produced on this side of the Atlantic.

GEORGE F. LINCOLN,
Consul.

UNITED STATES CONSULATE,
Stettin, Germany, 1882.

PORT OF BAHIA BLANCA.

REPORT BY CONSUL BAKER, OF BUENOS AYRES, TRANSMITTING SAILING DIRECTIONS FOR THE PORT OF BAHIA BLANCA, ARGENTINE REPUBLIC.

On the 13th of October last I reported to the Department the establishment of a light-house, by the Argentine Government, at the entrance to the bay of Bahia Blanca, on the South Atlantic coast.* I now inclose a translation of the sailing directions for entering the port of Bahia Blanca, by Lieutenant Howard, of the Argentine navy. These directions are official, and they will be found interesting not only to shipmasters, but all others who are seeking new outlets for our foreign commerce.

Bahia Blanca, as I have heretofore reported to the Department, is really the only port on the coasts of the Argentine Republic with water sufficient for the entrance of sea-going vessels; and with a rich grazing country back of it, which is already dotted with extensive cattle and sheep farms, it is destined to attain to considerable commercial importance. I may add that it will soon be united by rail with Buenos Ayres, the extension of the Great Southern Railway from its present terminus at Azul to Bahia Blanca now being in rapid process of construction; and this must give a great impetus to its trade, as the outlet of all the southern portion of the province of Buenos Ayres and Northern Patagonia. By arrangement with the Liverpool steamers of the Lamport & Holt line the materials for this extension are in great part to be delivered at Bahia Blanca instead of Buenos Ayres.

The Argentine National Government has already taken steps for the building of a mole and other necessary conveniences for the loading and discharge of cargo.

E. L. BAKER,
Consul.

UNITED STATES CONSULATE,
Buenos Ayres, April 12, 1882.

Sailing directions for the port of Bahia Blanca, Argentine Republic.

[Translation.]

PRESIDENT OF LIGHT-HOUSE AND BUOYS COMMISSION.

BAHIA BLANCA, *March* 22, 1882.

To the MINISTER OF WAR:

In compliance, as speedily as possible, with your excellency's telegraphic order, I have the honor to send you some notes on the "Directions for entering the port of Bahia Blanca" through the channel that is now buoyed.

* Published in No. 14 of Consular Reports, pages 724, 725.

Although these notes and observations are not very ample, yet, for an intelligent navigator, they are quite sufficient to enable him to enter the port without endangering his ship, and will supply the place of the "Directions" until the publication of the chart, which is now receiving the finishing touches.

HENRY G. HOWARD.

NOTE.—The courses ("rumbos") are magnetic.

DIRECTIONS FOR ENTERING THE PORT OF BAHIA BLANCA.

A vessel bound for Bahia Blanca, from whatever place, must approach the coast between Point Ascension and Mount Hermoso and keep along in sight of it about 8 miles off till the latter is in full view—an easy matter, as on its summit there is a mast which is 168 feet above sea-level, and can be seen in fine weather from a distance of 15 miles.

There is no danger whatever near Mount Hermoso; the roads, which are formed by the sweep of "the North Bank" and the shore, are in the form of a horseshoe; there are no rocks, and the water is 30 feet deep almost everywhere. It is completely open to winds of second and third quadrant, and is not to be recommended as an anchorage in summer or spring, although there is capital holding ground.

Twelve miles from Mount Hermoso, S. 17° E., the first buoy is anchored in 32 feet of water; it is painted yellow, and can be seen from 5 miles distance in fair weather. This buoy must be left to starboard, and although one buoy after another will be met with, the skipper who keeps his course, N. 17° W., allowing for the action of wind and current, will go straight in without the least difficulty, and the lead will never mark less than 30 feet.

The other buoys, which, like the first, must be left to starboard when entering, are painted red, and their conical shape, 11 feet over the water, sometimes enables them to be seen at a great distance, owing to atmospheric refraction, although the medium distance between each of them is only 6,500 meters; there are seven of them between the extreme eastern point of the North Bank and Punta sin Nombre (Nameless Point), a distance of 18 miles.

Great care is necessary off the third buoy; it lies S. 4° W. from Monte Hermoso, and a very slight deviation to the west would cause the navigator to miss the channel and take that marked on the chart of the British admiralty, which joins the buoyed channel at this point.

After passing this buoy the depth increases gradually till the lead shows 8 fathoms, but it diminishes again between the Gaucho and Toro banks (near the last buoy) to 6½ fathoms for about 1,000 meters; then again it increases rapidly to 13 fathoms, when any danger from the chain of banks forming the bar is over; from this point the shore of Puerto Belgrano can be coasted without fear, keeping at a fair distance, as it runs out a mile.

In fine weather the masts of the sunken light-ship Manuelita can be seen from a distance of 8 miles. She lies at the point marked Saco de Gaucho, on Fitzroy's chart, but which is now very much reduced from the colossal proportions the admiral assigned to it. Half a century has worked a surprising change in the whole bar, and it is not strange that the Gaucho's Jacket should have changed also.

Chance has placed the wrecked Manuelita in the most dangerous place for navigators, and she will serve as a beacon, if through any casualty the buoys should disappear. Her masts show the peril to be avoided, and in conjunction with the tripod placed on the shore near "Nameless point," they will be a sufficient guide for those with a slight practical knowledge of the port.

The buoys mentioned once left astern, two more will be found, one moored on the same parallel as Arroyo Pareja, and the other on that of Punta Alta. Both must be left to starboard. From the second can be descried a mast which is on the northern extremity of Three Fathom Creek. Passing this at a fair distance, and steering NW. 4° N., a false channel is passed on the starboard, and with 5 fathoms minimum depth the mouth of the "riacho" which leads to the anchorage opposite Sauce Chico, or Naposta, is reached. There is a mast on each side of the stream [riacho], and there is no difficulty whatever for vessels drawing 16 feet of water.

IMPORT DUTIES OF HOLLAND.

TRANSMITTED BY CONSUL WINTER, OF ROTTERDAM.

Page.	Articles.	Standard.	Duties.
25	Manufactures of farina, n. o. p. f	100 kilograms	2 florins.
26	Earthenware of all kinds, n. o. p. f	Value	5 per cent.
28	Almonds	100 kilograms	4 florins.
29	Ammunition, n. o. p. f	Value	5 per cent.
29	Brass cannons	100 kilograms	7. 50 florins.
29	Iron cannons	100 kilograms	1. 25 florins.
29	Cannon balls	100 kilograms	0. 75 florin.
31	Vinegar, strength 2° or less on Dutch areometer	Cask	3 florins.
31	Vinegar, strength more than 2°	Cask	20 florins.
34	Beer	Cask	3 florins.
36	Manufactures of tin	Value	5 per cent.
38	Mineral water, in bottles	100 bottles	0. 50 florin.
38	Mineral water, in jars	100 jars	0. 25 florin.
39	Gunpowder	100 kilograms	5 florins.
42	Chocolade prepared with sugar	100 kilograms	25 florins.
42	Peels of oranges and lemons	Value	5 per cent.
50	Yarns, woollen and worsted, dyed, twined and not dyed, of more than two threads	Value	5 per cent.
51	Spirits	Cask, and 50 per cent. alcohol.	3. 50 florins.
51	Spirits, Houtgeest	Liter	1. 15 florins.
57	Ginger	100 kilograms	6 florins.
58	Manufactures of plaster	Value	5 per cent.
58	Glassware	Value	5 per cent.
59	Manufactures of India rubber	Value	5 per cent.
59	Manufactures of gold and silver	Value	5 per cent.
59	Gold thread and silver thread	Value	3 per cent.
61	Preserved vegetables	Value	5 per cent.
61	Manufactures of gutta-percha	Value	5 per cent.
61	Hair, prepared wigs and curls	Value	5 per cent.
63	Hats, or felt for hats	Value	5 per cent.
64	Honey	100 kilograms	2. 50 florins.
64	Manufactures of wood wholly finished	Value	5 per cent.
65	Prepared furs	Value	5 per cent.
65	Leatherwork for saddlers, shoemakers, and trunkmakers, n. o. p. f.	Value	5 per cent.
66	Manufactures of iron, cast, forged, flattened, and anvils	Value	5 per cent.
69	Instruments, mathematical, physical, medical, optical, and musical	Value	5 per cent.
69	Ivory	Value	5 per cent.
69	Candles: Tallow	100 kilograms	3 florins.
69	All other kinds	Value	5 per cent.
69	Playing-cards	Value	5 per cent.
70	Cheese of all kinds	100 kilograms	5 florins.
73	Clothing and wearing apparel, n. o. p. f	Value	5 per cent.
74	Confectioners' works	100 kilograms	25 florins.
76	Manufactures of copper and copper thread	Value	5 per cent.
76	Coral	Value	5 per cent.
77	Currants	100 kilograms	1. 50 florins.
77	Stationery and cutlery	Value	5 per cent.
79	Cork	100 kilograms	10 florins.
80	Lamps	Value	5 per cent.
82	Frames	Value	5 per cent.
83	Lemon juice	Cask	3 florins.
84	Macaroni	100 kilograms	2 florins.
85	Manufactures of silk, cotton, hemp, flax, &c., n. o. p. f.	Value	5 per cent.
89	Furniture	Value	5 per cent.
90	Fashion wares	Value	5 per cent.
92	Oil, n. o. p. f	100 kilograms	0. 55 florin.
96	Mother of pearl	Value	5 per cent.
98	Umbrellas and parasols	Value	5 per cent.
100	Pepper	100 kilograms	1. 50 florins.
104	Pimento	100 kilograms	1 florin.
105	Platina	1 kilogram	0. 10 florin.
107	Prunes, except fresh	100 kilograms	1. 50 florins.
108	Perfume	Value	5 per cent.
110	Ravalenta arabica	100 kilograms	0. 40 florin.
110	Carriages	Value	5 per cent.
111	Raisins	100 kilograms	2 florins.
111	Raisins, Samos Denia, for the manufacture of raisin vinegar	100 kilograms	0. 25 florin.
112	Vessels and steamers intended to remain in the country	Value	1 per cent.
117	Spices, n. o. p. f	Value	5 per cent.
117	Manufactures of spelter or zinc	Value	5 per cent.
118	Looking-glasses	Value	5 per cent.
118	Manufactures of steel	Value	5 per cent.

Import duties of Holland—Continued.

Page.	Articles.	Standard.	Duties.
121	Sirup	100 kilograms...	6 florins.
125	Candied lemon-peel	100 kilograms...	3 florins.
125	Tobacco: Leaf and stems, unmanufactured	100 kilograms...	0.70 florin.
125	Stems, manufactured	100 kilograms...	1.50 florins.
125	Manufactured	100 kilograms...	12 florins.
125	Cigars	100 kilograms...	40 florins.
127	Carpets	Value	5 per cent.
128	Tea	100 kilograms ..	25 florins.
129	Manufactures of tin	Value	5 per cent.
130	Clocks and watches	Value	5 per cent.
132	Vermicelli	100 kilograms...	2 florins.
133	Dye-stuffs, in oil, except printing ink	Value	5 per cent.
133	Figs	100 kilograms...	1 florin.
134	Meats: Of all kinds, n. o. p. f., and sausage, fresh and salted	100 kilograms...	6 florins.
135	Smoked and dried	100 kilograms...	8 florins.
135	Mutton, pork, and lard, salted	100 kilograms...	1 florin.
135	Smoked and dried	100 kilograms...	1.25 florin.
135	Canned, Australian or American	100 kilograms...	6 florins.
135	Beef, mutton, and pork	100 kilograms...	1 florin.
136	Venison and poultry	Value	5 per cent.
138	Fruits: Fresh and dried, n. o. p. f.	Value	5 per cent.
138	Salted, or preserved in brandy and vinegar	Value	10 per cent.
138	Preserved in sugar and sirup	100 kilograms...	18 florins.
139	Manufactures of wax and sealing-wax	Value	5 per cent.
143	Soaps: Hard and soft	100 kilograms...	4.50 florins.
143	Perfumed	100 kilograms...	6 florins.
145	Salt	100 kilograms...	12 florins.

TARIFF LAWS OF THE COLONY OF NEW PROVIDENCE.

REPORT BY CONSUL M'LAIN, OF NASSAU.

I have the honor to say that, in compliance with the request contained in your circular dispatch of December 1, 1881, received by the last mail, I have this day forwarded you a printed pamphlet containing, among other matters, the specific information you desired touching the tariff laws and rates of duty as they now exist within this colony.

These items will be found on pages 41 to 49 inclusive, and this is the only shape (aside from the bulky volume of Bahama's Statutes) in which the tariff laws and rates of import and export duties of this colony appear in print, and I trust it may prove satisfactory to the Department.

THOMAS J. McLAIN, JR.,
Consul.

UNITED STATES CONSULATE,
Nassau, January 2, 1882.

THE TARIFF.

Table of import duties.

Per act 39 Vic., cap. 1. (Continued for three years by 43 Vic., cap. 2.)

		£.	s.	d.
Alcohol	per gallon..	0	4	0
Ale and porter, in wood	do.....	0	0	6
Ale and porter (in bottles), quarts	per dozen..	0	1	0
Apples	per barrel..	0	2	6
Beans and pease	per bushel..	0	0	3
Biscuit and bread, fancy	per 100 pounds..	0	4	0
Biscuit and bread, common	per barrel..	0	2	0
Brandy	per gallon..	0	9	0
Butter	per pound..	0	0	2

	£.	s.	d.
Cabbages.....per 100..	0	4	2
Calves.....each..	0	6	0
Candles, sperm, wax, and adamantine, or any composition of tallow and other substances.....per 100 pounds..	0	11	0
Candles, tallow.....do.....	0	6	0
Cattle, cows, bulls, and oxen.....each..	0	10	0
Cheese.....per 100 pounds..	0	10	0
Cider, in wood..... } Cider, in bottles (quarts) } 20 per cent. ad valorem. Cider, champagne..... }			
Cigars, 15 per cent. ad valorem, and per thousand.....	0	8	0
Cocoa.....per 100 pounds..	0	3	0
Coffee.....do.....	0	8	0
Colts and foals.....each..	1	0	0
Copper and yellow metals in sheets, copper and composition bolts and nails.....per 100 pounds..	0	7	6
Cordials, 20 per cent. ad valorem.....			
Corn.....per bushel..	0	0	3
Corn meal and hominy.....per barrel..	0	2	0
Currants, figs, and raisins.....per 100 pounds..	0	8	0
Dogs.....each..	0	10	0
Fish, dried or salted.....per 100 pounds..	0	2	6
Fish, pickled salmon, mackerel, and shad.....per barrel..	0	4	6
Fish, herrings, alewives, and other kinds not enumerated.....per barrel..	0	4	6
Flour (wheat).....do.....	0	5	0
Flour (rye).....do.....	0	2	0
Gin, whisky, and other spirits not enumerated.....per gallon..	0	3	9
Goats.....each..	0	2	0
Gunpowder.....per pound..	0	0	6
Hay.....per 100 pounds..	0	1	0
Honey and sirup.....per gallon.	0	0	2
Horses, mares, and geldings.....each..	1	0	0
Hulks, and materials of vessels, 20 per cent. ad valorem.			
Lard.....per pound..	0	0	1
Lumber.....per M feet..	0	10	0
Meat, poultry, and game, fresh on ice.....per 100 pounds..	0	6	0
Meat salted or cured.....do.....	0	6	0
Molasses.....per gallon..	0	0	2½
Mules and asses.....each..	0	10	0
Nails of iron.....per 100 pounds..	0	3	0
Oats and bran.....per bushel..	0	0	3
Oils, kerosene, linseed, and other kinds unenumerated, except essential oils.....per gallon..	0	0	7½
Oils, olive, sperm, lard, naphtha, and all other fluids used for burning...do.....	0	1	0
Pitch, rosin, and tar.....per barrel..	0	1	3
Potatoes, onions, and other vegetables.....do.....	0	1	0
Prunes.....per 100 pounds..	0	10	0
Rice.....do.....	0	2	0
Rum, stronger than 18 per bubble.....per gallon..	0	4	6
Rum, 18 and not weaker than 24 per bubble.....do.....	0	3	9
Rum, weaker than 24 per bubble.....do.....	0	3	0
Sheep.....each..	0	2	0
Shingles, cypress.....per M..	0	2	6
Shingles, not cypress.....do.....	0	2	0
Soap, common washing.....per 100 pounds..	0	5	0
Sugar, unrefined.....do.....	0	5	6
Sugar, white clayed.....do.....	0	10	0
Sugar, refined.....do.....	0	12	6
Swine.....do.....	0	2	6
Tallow.....do.....	0	3	0
Tea of all sorts.....per pound..	0	1	0
Tobacco, manufactured.....per 100 pounds..	1	10	0
Tobacco, unmanufactured.....do.....	0	11	3
Turpentine.....per barrel..	0	1	3
Turpentine, spirits of.....do.....	0	0	3
Wines of all kinds.....20 per cent. ad valorem, and per gallon..	0	2	0

Articles not enumerated, except such as are comprised in the table of exemptions, 20 per cent. ad valorem.

Provided, always, That articles herein made subject on regular importation to the

above ad valorem duty, when not originally shipped with the intention of being brought into this colony, however subsequently they may be imported, and when the requisite information for perfect entry of the same as to the cost or value in the country of production or place at which they were originally shipped cannot be ascertained or obtained, shall, in lieu of such duty, be charged a duty of 25 per centum on the value at the port of entry, or on the price which they shall realize at auction, when sold and delivered for consumption therein, at the option of the importer, agent, or consignee.

II. That all articles specified in the following table of exemptions be imported without the payment of any duties whatsoever:

TABLE OF EXEMPTIONS.

Articles imported or supplied out of a bonded warehouse for the imperial or colonial service.

Articles of every description imported or supplied from a bonded warehouse for the use of the governor or officer administering the government.

Bulbs and roots, seeds of all kinds, shrubs, and trees imported for planting, birds, bullion, cocoa-nuts, coin, copper and composition, old, fit only to be remanufactured; cotton, wool, dye-woods and stuffs, and divi-divi; flax, hemp, ice, iron, old, fit only to be remanufactured; lignum-vitæ, mahogany; manure of all kinds; maps, mettaline ores, oakum, ova of fish, passengers' baggage, philosophical instruments and apparatus, printed books and pamphlets; provisions and stores of every description imported or supplied from a bonded warehouse for the use of Her Majesty's land and sea forces; raw hides, specimens of natural history, mineralogy, or botany, steam machines or engines, or any parts thereof, of every description and for whatever use intended; iron rails and sleepers, used in the construction of railways and tramways; boilers, mills, and parts of mills intended to be used in the making of sugar or grinding of salt; stills and boilers for the distillation of turpentine or other spirits; staves, heads, and hoops used in the construction of barrels or other packages for the exportation of spirits of turpentine or other spirits; iron screw piles used in the construction of wharves; cotton gins, tortoise shell, tow, turtle, and fresh fish, not preserved in any way; wax, woods, cedar and yellow; coal, sponge, patent steering machines, spars, windlasses and capstans.

Provided always, That if metalline ores, raw hides, dye-woods and stuffs, divi-divi, mahogany, lignum-vitæ, cedar and yellow wood; wax, hemp, flax, iron, cottonwood or tortoise shell, proposed to be exempted from import duties, shall be brought otherwise than by regular importation into any port or place of this colony and sold at public auction, whether such sale shall take place by order of a court of law or otherwise, there shall be imposed and paid upon the gross amount of such sales, in addition to any other auction duty chargeable on such sale, an auction duty or tax of £5 per centum; and the vendue master or marshal, selling any such goods, shall retain such duty of £5 per centum out of the gross sales of the goods so sold by him, and shall forthwith pay the same over to the receiver-general or other proper receiver; and if such vendue master or officer shall neglect to retain such duty, or having retained the said duty, shall neglect to pay the same over as aforesaid, every such vendue master or officer shall be personally liable therefor; and the same may be recovered against him by action of debt in any court having jurisdiction to the amount.

III. That the words "provisions and stores," in the second section of this act, mentioned as being exempted from the payment of duty, when imported for the use of Her Majesty's land and sea forces, shall not extend or apply to cattle or other live stock imported by any contractor for the supply of fresh meat to Her Majesty's said forces, all which cattle and other live-stock shall be liable to the payment of the duties by this act imposed. *And provided also, and be it enacted*, That it shall not be lawful for the receiver-general and treasurer, or collectors of revenue, as the case may be, to allow any provisions, spirits, or other stores imported or supplied, as aforesaid, for the use of Her Majesty's land or sea forces to be landed or taken out of a bonded warehouse as free of duty, except in the name of the senior officer of the commissariat department, or the quartermaster or other proper garrison or regimental officer, or the purser or other proper naval officer, as the case may be.

IV. That if any provision, spirits, or other stores as aforesaid, imported or taken out of bond as for the use of Her Majesty's land or sea forces, shall be afterwards applied to any other use than the one mentioned in the entry, order of delivery, or other document, under the authority of which the same were landed or taken out of bond as free of duty, the officer in whose name the same were so landed or taken out of bond, or in case of his death or removal, the officer succeeding him in the same department, shall be liable for all duties due on the same, or on such part thereof as shall be so otherwise applied as aforesaid, and the said duties shall be recovered and applied in the same and the like manner as other duties imposed by this act are directed to be recovered and applied.

V. That if any provisions, spirits, or other stores so landed, or taken out of bond as aforesaid, shall be clandestinely sold, or otherwise disposed of, other than to the use of Her Majesty's land or sea forces, every person concerned in such clandestine sale or disposal, shall forfeit and pay treble the value of the articles so clandestinely sold or disposed of, and all such articles shall be liable to seizure and condemnation, one moiety of which said forfeiture shall be paid into the public treasury towards the support of this government, and the other to the person suing for the same, and shall be sued for and recovered in the general court of these islands.

VI. That there shall be imposed and paid upon the gross amount of sales of all property disposed of at public auction by order of the court of vice-admiralty an auction duty, or tax of £2 per centum; and the marshal, or other duly authorized person, selling any such property at public auction as aforesaid, shall retain such duty of £2 per centum out of the gross sales thereof, and shall forthwith pay the same over to the receiver-general, or other proper receiver, and if such marshal, or other duly authorized person as aforesaid, shall neglect to retain such duty, or having retained the said duty, shall neglect to pay the same over as aforesaid, every such marshal or other duly authorized officer shall be personally liable therefor, and the same may be recovered against him by action of debt in any court having jurisdiction to the amount.

VII. The acts, 17 Victoria, chapter 2; 37 Victoria, chapter 7; 37 Victoria, chapter 8; and 38 Victoria, chapter 22, shall be and the same are hereby repealed.

VIII. That this act shall continue in force for and during the period of three years, and from thence to the end of the then next session of assembly.

By the act to encourage the establishment of manufactures for preserving and packing fruit and other articles of colonial production (39 Vic., c. 18), the various articles specified in the schedule thereto may be imported without payment of duty.

EXPORT DUTY.

(Per 40 Vic., cap. 7.)

I. There shall be levied and paid to the use of Her Majesty, her heirs and successors, towards the support of the government of these islands, an export duty at and after the rate of 2*s.* per ton, on all guano, cave or other earths which may be hereafter exported from these islands.

II. Where the actual quantity of guano, cave or other earths shipped on board of any vessel for exportation from the colony can be ascertained and shown to the satisfaction of the proper revenue officer of the port at which such vessel shall be cleared, the duty imposed by this act shall be levied and collected on such ascertained quantity; but where the quantity so shipped cannot be ascertained and shown to the satisfaction of the said revenue officer, then, and in such case only, the registered tonnage of any vessel in which such guano, or other earths as aforesaid, shall be exported, shall be taken to be the number of tons of guano or earths exported in such vessels, whether the quantity actually taken on board be in excess or less than such registered tonnage.

III. There shall be levied and paid upon the exportation to any port or place within the limits of the government, of all articles (except as hereinafter mentioned), which have been brought or imported into any port within the colony from beyond the limits thereof, and upon which no duties other than warehouse duty, auction tax, or auction duty, shall have been levied and paid upon the original entry, or importation thereof, an export duty of 1½ per centum on the value thereof.

IV. That such duty as last aforesaid shall be paid by the original consignee or agent of such articles, before the vessel in which they are shipped for exportation shall leave the port, and if not so paid may be recovered from such consignee or agent in an action of debt, at the suit of the officer to whom the same is by this act made payable in any court having jurisdiction to the amount, and it shall also be lawful for such officer to detain and refuse to clear out the vessel in which such articles are intended to be exported until such duty is paid.

V. That export duty shall not be levied under this act on any cargo of any vessel which may arrive at or put into any port of the colony in distress.

VI. The articles specified in the following table of exemptions shall be exported without the payment of any export duty.

TABLE OF EXEMPTIONS.

Articles which have been imported for the colonial service and imperial light-house service and exported by the government; articles which have been imported for the use and accommodation of any officer of Her Majesty's army and navy on full pay and doing duty within these islands, and exported by such officer; articles of every description which may be exported by the governor or officer administering the government; passengers' baggage, turtle, woods—such as brazilletto, cedar, fustic, lignum-

vitæ, satin, logwood, mahogany, and ebony—old iron, old copper and brass, specie, old rags, old junk.

VII. The duties by this act imposed shall be collected and received by the proper officers of the revenue department, and the payment thereof enforced under the provisions of the revenue consolidated act, 1873.

VIII. This act may be cited as "The export duty act, 1877."

The following acts and parts of acts shall be, and the same are hereby, repealed: First, thirteenth, and fifteenth sections 22 Victoria, chapter 25; 38 Victoria, chapter 35; and 39 Victoria, chapter 2.

TONNAGE DUTY.

(Per 43 Victoria, cap. 3.)

I. From and after the commencement of this act, and during its continuance, the following rates of tonnage shall be imposed, levied, and paid on vessels, except such as are hereinafter excepted, arriving at any port within these islands from any port or place without the limits of this government, and on goods imported in such vessel, that is to say:

On every vessel arriving with cargo intended to be discharged within the colony, and exceeding in measurement or weight one-half of the tonnage of the vessel, 1*s.* for each and every ton of the proper measurement of such vessel.

On every vessel arriving wholly or only partially laden, and from which any portion of the cargo, not exceeding in measurement or weight one-half of the tonnage of the vessel, is intended to be discharged within the colony, 1*d.* for each and every ton of the ascertained tonnage of such vessel, and 1*s.* per ton measurement or weight of the goods landed from such vessel.

On every vessel arriving in ballast or with cargo not intended to be discharged within the colony, 1*d.* for each and every ton of the proper measurement of the vessel.

Provided, That the following vessels shall be excepted and exempted from the payment of the tonnage dues by this section imposed, that is to say:

EXEMPTIONS.

All vessels of war, transports, and other vessels employed solely on government service.

All vessels employed under contract with the Bahama Government in the conveyance of mails.

Vessels exclusively engaged in turtling, sponging, or fishing.

Vessels employed in pleasuring only.

II. From and after the commencement of the act, and during its continuance, the following rates of tonnage shall be imposed, levied, and paid on vessels, except such as are hereinafter excepted, clearing from any port of the colony for any port or place without the limits of the government, and on goods exported in such vessels, that is to say:

On every vessel clearing with outward cargo laden within the colony, other than salt or fruit, exceeding one-half of the ascertained tonnage of the vessel, 1*s.* for each and every ton of the proper measurement of such vessel.

On every vessel clearing with outward cargo laden within the colony, other than salt or fruit, not exceeding in measurement or weight one-half of the ascertained tonnage of the vessel, and whether any portion of the inward cargo is still laden on board or not, 1*d.* for each and every ton of the proper tonnage of such vessel, and 1*s.* per ton measurement or weight of the goods so shipped or exported.

On every vessel clearing in ballast, or with salt or fruit, or salt and fruit, and with or without any portion of her inward cargo still being laden on board, 1*d.* for each and every ton of the proper measurement of such vessel.

EXEMPTIONS.

All vessels of war, transports, and other vessels employed solely in governmen service.

All vessels employed under contract with the Bahama Government in the conveyance of mails.

Vessels exclusively engaged in turtling, sponging, or fishing.

Vessels employed in pleasuring only.

All vessels arriving in the colony with cargo and departing thence with the same inward cargo, without taking on board any other cargo, the inward tonnage duty on such vessels having been paid.

III. In the measurement of goods eight flour barrels shall be computed as equal to one ton or 40 cubic feet, and other articles or packages shall be computed in like

proportion, or by the ton weight in the case of metals or other heavy articles for which freight by weight is usually charged.

IV. The word "fruit" as used herein, shall not be construed to include or comprise preserved fruits of any description.

V. The duties by this act imposed shall be collected and received by the proper officers of the revenue department of the colony, and the collection thereof shall be enforced under the powers of the law for the time being in force for regulating the trade of the Bahama Islands; and such duties, when received, shall be applied towards the support of Her Majesty's government in the colony as may be provided for by any act or acts of the general assembly of these islands now or hereafter to be in force.

VI. This act may for all purposes be cited as the "Tonnage act, 1880."

VII. This act shall continue in force for five years, and from thence to the end of the then next session of assembly, during which period the act of assembly of the thirty-second year of Her Majesty's reign, chapter 22, shall be suspended.

All vessels engaged in taking away an entire cargo consisting of preserved fruits, &c., packed at manufactories established under the authority of act 39 Vic., c. 18, and all vessels arriving with an entire cargo consisting of materials for building sheds, or factories, and articles to be used in such manufactories.

Under the act 41 Vic., c. 2, vessels bringing entire cargoes of coal for the use of any steam-packet company, and merchandise for transhipment on board their vessels, or entire cargoes of coal or merchandise as aforesaid, are exempted from tonnage dues.

Under the act 43 Vic., cap. 5, steamers are exempted from the payment of tonnage duties.

Light Dues.

By the act 38 Vic., c. 23, a light duty of 3*d.* per ton is imposed on all vessels, save and except those hereinafter excepted, arriving at the port of Nassau from any port or place without the limits of the colony.

EXEMPTIONS.

Ships of war.

Vessels employed in the service of the board of trade.

Vessels employed, under contract with the Bahama Government, in the conveyance of mails.

Vessels belonging to the Royal Yacht Squadron.

Vessels exclusively engaged in turtling, sponging, or fishing.

Vessels engaged in pleasuring only.

Vessels arriving with an entire cargo, consisting of materials for building sheds or factories, and articles to be used in manufactories established under the authority of act 39 Vic., c. 18.

Registry Fee.

By 43 Vic., cap. 4, a fee is charged on all vessels, except those built in the Bahamas or previously registered at the port of Nassau, obtaining a register, of 1*s.* per ton.

Warehouse Charges.

By 43 Vic., cap. 4, a tax of 10*s.* for every hundred pounds is charged on the value of all goods imported and warehoused in a bonded warehouse.

Auction Duty.

By 17 Vic., cap. 2, a tax of £5 per centum is charged on the proceeds of sale at public auction of certain articles brought into the colony otherwise than by regular importation and not liable to import duty.

Pierage, Storage, and Scalеage Rates.

RATES OF PIERAGE PER DAY.

By 37 Vic., cap. 14, the following fees are charged on all vessels discharging and lading cargoes at any public abutment, wharf, or extended slip in Nassau, or at any other port within the colony:

	£.	s.	d.
For every vessel of the burden of 20 tons and under.....per day..	0	4	0
For every vessel over 20 tons and not exceeding 30 tons.....do....	0	5	0
For every vessel over 30 tons and not exceeding 40 tons.....do....	0	6	0
For every vessel over 40 tons and not exceeding 50 tons.....do....	0	7	0

	£.	s.	d.
For every vessel over 50 tons and not exceeding 60 tons .....per day..	0	8	0
For every vessel over 60 tons and not exceeding 70 tons .....do....	0	10	0
For every vessel over 70 tons and not exceeding 80 tons .....do....	0	12	0
For every vessel over 80 tons and not exceeding 90 tons .....do....	0	14	0
For every vessel over 90 tons and not exceeding 100 tons .....do....	0	16	0
For every vessel over 100 tons and not exceeding 150 tons .....do....	0	18	0
For every vessel over 150 tons and not exceeding 200 tons .....do....	1	0	0
For every vessel over 200 tons and not exceeding 250 tons .....do....	1	2	6
For every vessel over 250 tons and not exceeding 300 tons .....do....	1	5	0
On every additional ton, 1*d.* per ton.			

RATES OF STORAGE PER WEEK.

	£.	s.	d.
All packages measuring less than 2 cubic feet	0	0	0½
All packages measuring 2 cubic feet and less than 5 cubic feet	0	0	0½
All packages measuring 5 cubic feet and less than 10 cubic feet	0	0	1
All packages measuring 10 cubic feet and less than 15 cubic feet	0	0	1½
All packages measuring 15 cubic feet and less than 20 cubic feet	0	0	2
All packages measuring 20 cubic feet and less than 30 cubic feet	0	0	3
All packages measuring 30 cubic feet	0	0	4
And 1*d.* for every additional 10 feet.			
Barrels containing wines, spirits, oils, and other liquids in bulk, pickled meats or fish, honey and unrefined sugar, and other packages containing articles liable to leak or drain, measuring 5 and not more than 10 cubic feet	0	0	1½
Half-barrels, same	0	0	0¾
Barrels containing flour, meal, bread, &c	0	0	1
Half-barrels containing flour, meal, bread, &c	0	0	0½
Hogsheads containing sugar	0	0	9
Hogsheads containing molasses, for the ground tier 1*s.*, with the option to the party storing of storing a second tier, 6*d.*, and third tier	0	0	3
Puncheons and pipes, containing liquid in bulk, exceeding 30 cubic feet...	0	0	10
Crates containing crockery and earthenware	0	0	6
Coals .....per hogshead..	0	0	6
Coals, loose .....per ton..	0	0	9
Coffee, corn, oats, wheat, rice .....per bag..	0	0	0½
Pimento and cocoa .....do....	0	0	0¾
Rice .....per tierce..	0	0	3
Iron, copper ore, and other metals or ores .....per ton..	0	0	4½
Lumber in yards .....per M feet..	0	0	6
Mahogany, and other square wood .....do....	0	0	8
Staves .....per M..	0	1	3
Dye woods .....per ton..	0	0	4
Sugar .....per box..	0	0	2
Hides .....per hundred..	0	1	0
Cotton:			
Under shed or store .....per bale..	0	0	6
Not under shed or store .....do....	0	0	4
Granite stone or marble .....per ton..	0	0	6
All articles wrecked, not in original packages, but loose in lots, also materials of vessels, one-half per cent. on sale at auction.			
All property wrecked, consisting of assorted bales, boxes, crates of merchandise, appraised and reshipped bulk, to be estimated in barrels, at ..	0	0	1½

RATES OF WHARFAGE PER WEEK.

Equal to one week's storage on similar packages.

RATES OF SCALEAGE.

	£.	s.	d.
On every package weighing less than 1 cwt	0	0	0½
On every package weighing over 1 and not exceeding 5 cwt	0	0	0½
On every 5 and not exceeding 10 cwt	0	0	1
On every 10 and not exceeding 15 cwt	0	0	1½
On every 15 and not exceeding 20 cwt	0	0	2
On every ton of wood	0	0	2
On every ton of metal	0	0	2

THE TARIFF OF JAPAN.

TRANSMITTED BY CONSUL STAHEL, OF OSAKA AND HIOGO.

In compliance with instructions contained in Department of State circular, dated December 1, ultimo, I have the honor to transmit herewith the present import and export tariff of Japan.

J. STAHEL,
Consul.

UNITED STATES CONSULATE,
Hiogo, March 13, 1882.

Import and export tariff under the new convention of 1866 *and subsequent arrangements.*

IMPORT TARIFF.

CLASS 1.—*Specific duties.*

No.	Articles.	Per—	*Boos.	Cents.
1	Alum	100 catties	0	15
2	Betel-nut	do	0	45
3	Brass buttons	Gross	0	22
4	Candles	100 catties	2	25
5	Canvas and cotton duck	10 yards	0	25
6	Cigars	Catty	0	25
7	Cloves and mother cloves	100 catties	1	00
8	Cochineal	do	21	00
9	Cordage	do	1	25
10	Cotton, raw	do	1	25
	Cotton manufactures:			
11	Shirtings (grey, white, and twilled, white, spotted, or figured), drills and jeans, white brocades, T-cloths, cambrics, muslins, lawns, dimities, quilting, cottonets. All the above goods dyed. Printed cottons, chintzes, and furnitures:			
	A. Not exceeding 34 inches wide	10 yards	0	7½
	B. Not exceeding 40 inches wide	do	0	8¾
	C. Not exceeding 46 inches wide	do	0	10
	D. Exceeding 46 inches wide	do	0	11½
12	Taffachelass:			
	Not exceeding 31 inches	do	0	17½
	Exceeding 31 inches and not exceeding 43 inches	do	0	25
13	Fustians, as cotton velvets, velveteens, satins, satinets, and cotton damask, not exceeding 40 inches.	do	0	20
14	Ginghams:			
	Not exceeding 31 inches	do	0	6
	Not exceeding 43 inches	do	0	9
15	Handkerchiefs	Dozen	0	5
16	Singlets and drawers	do	0	25
17	Table-cloths	Each	0	6
18	Cotton thread, plain or dyed, in reel or ball	100 catties	7	50
19	Cotton yarn, plain or dyed	do	3	00
20	Catechu	do	0	75
21	Feathers (kingfisher, peacock, &c.)	100 in number	1	50
22	Flints	100 catties	0	12
23	Gambier	do	0	45
24	Gamboge	do	3	75
25	Glass, window	Box of 100 square feet	0	35
26	Glue	100 catties	0	60
	Gum:			
27	Benjamin and oil of gum	do	2	40
28	Dragon's blood, myrrh, olibanum	do	1	80
29	Gypsum	do	0	8
30	Hides, buffalo and cow	do	1	20
31	Horns, buffalo and deer	do	1	5
32	Horns, rhinoceros	do	3	50
33	Hoofs	do	0	30

* See rule III, page 639.

Import and export tariff under the new convention of 1866, *&c.*—Continued.

IMPORT TARIFF—CLASS 1.—*Specific duties*—Continued.

No.	Articles.	Per—	Boos.	Cents.
	Indigo:			
34	Liquid	100 catties	0	75
35	Dry	do	3	75
36	Ivory, elephants' teeth, all qualities	do	15	00
37	Paint, as red, white, and yellow lead (minium, ceruse, and massicot), and paint oils.	do	1	50
38	Leather	do	2	00
39	Linen, all qualities	10 yards	0	20
40	Mangrove bark	100 catties	0	15
41	Matting, floor	Roll of 40 yards	0	75
	Metals:			
42	Copper and brass in slabs, sheets, rods, nails	100 catties	3	50
43	Yellow metal, muntz metal sheathing and nails	do	2	5
	Iron, manufactured:			
44	Rods, bars, nails, &c.	do	0	30
45	Pigs	do	0	15
46	Kentledge	do	0	6
47	Wire	do	0	80
	Lead:			
48	Pigs	do	0	80
49	Sheet	do	1	00
50	Spelter and zinc	do	0	60
51	Steel	do	0	60
52	Tin	do	3	00
53	Tin-plates	Box of not exceeding 90 catties.	0	70
54	Oil-cloth for flooring	10 yards	0	30
55	Oil-cloth or leather for furniture	do	0	15
56	Pepper, black and white	100 catties	1	00
57	Putchuck	do	2	25
58	Quicksilver	do	6	00
59	Quinine	Catty	1	50
60	Rattans	100 catties	0	45
61	Rhubarb	do	1	00
62	Salt fish	do	0	75
63	Sandal wood	do	1	25
64	Sapan wood	do	0	40
65	Sea-horse teeth	do	7	50
66	Narwhal or "unicorn" teeth	Catty	1	00
67	Sharks' skins	100 pieces	7	50
68	Snuff	Catty	0	30
69	Soap, bar	100 catties	0	50
70	Stick lac	do	1	75
	Sugar:			
71	Brown and black	do	0	40
72	White	do	0	75
73	Candy and loaf	do	1	00
74	Tobacco	do	1	80
75	Vermillion	do	9	00
	Woolen manufactures:			
76	Broad, habit, medium, and narrow cloth—			
	Not exceeding 34 inches	10 yards	0	60
	Not exceeding 55 inches	do	1	00
	Exceeding 55 inches	do	1	25
77	Spanish stripes	do	0	75
78	Cassimeres, flannel, long ells, and serges	do	0	45
79	Bunting	do	0	15
	Camlets:			
80	Dutch	do	0	75
81	English	do	0	40
82	Lastings, crape lastings, and worsted crapes, merinos, and all other woolen goods not classed under No. 76:			
	A. Not exceeding 34 inches	do	0	30
	B. Exceeding 34 inches	do	0	45
83	Woolen and cotton mixtures as imitations, camlet imitation, lastings, Orleans (plain and figured), lustres (plain and figured), alpacas, baratheas, damasks, Italian cloth, taffachelass, russell cords, cassandras, woolen fancies, camlet cords, and all other cotton and woolen mixtures—			
	A. Not exceeding 34 inches	do	0	30
	B. Exceeding 34 inches	do	0	45
84	Blankets and horse cloths	10 catties	0	50
85	Traveling rugs, plaids, and shawls	Each	0	50
86	Figured woolen table cloths	do	0	75
87	Woolen singlets and drawers	Dozen	0	80
88	Woolen and cotton singlets and drawers	do	0	50
89	Woolen yarn, plain and dyed	100 catties	10	00

CLASS II.—*Duty-free goods.*

All animals used for food or draught; anchors and chain cables; coal; clothing not being articles named in this tariff; gold and silver, coined and uncoined; grain, including rice, paddy, wheat, barley, oats, rye, pease, beans, millet, Indian corn; flour and meal prepared from above; oil-cake; packing-matting; printed books; salt; salted meats in casks; saltpeter; solder; tar and pitch; tea-firing pans and baskets; tea lead; traveling baggage.

CLASS III.—*Prohibited goods.*

Opium.

CLASS IV.—*Goods subject to an ad valorem duty of five per cent. on original value.*

Arms and munitions of war; articles de Paris; boots and shoes; clocks, watches, and musical boxes; coral; cutlery; drugs and medicines, such as ginseng, &c.; dyes; European porcelain and earthenware; furniture of all kinds, new and second-hand; glass and crystal ware; gold and silver lace and thread; gums and spices not named in tariff; lamps; looking-glasses; jewelry; machinery and manufactures in iron or steel; manufactures of all kinds in silk and cotton or silk and wool, as velvets, damasks, brocadess, &c.; paintings and engravings; perfumery, scented soap; plated ware; skins and furs; telescopes and scientific instruments; timber; wines, malt and spirituous liquors; table stores of all kinds, and all other unenumerated goods.

EXPORT DUTIES.

CLASS I.—*Specific duties.*

No.	Articles.	Per.	Boos.	Cents.
1	Awabi	100 catties	3	00
2	Awabi shells	do	0	08
3	Camphor	do	1	80
4	China root (bukrio)	do	0	75
5	Cassia	do	0	30
6	Cassia buds	do	2	25
7	Coal	do	0	04
8	Cotton (raw)	do	2	25
9	Coir	do	0	45
10	Fish, dried or salted, salmon and cod	do	0	75
11	Fish, cuttle	do	1	05
12	Gallnuts	do	0	90
13	Ghinang, or ichio	do	0	45
14	Hemp	do	2	00
15	Honey	do	1	05
16	Horns, deers', old	do	0	90
17	Irico, or beche de mer	do	3	00
18	Iron, Japanese	do	0	60
19	Isinglass	do	2	25
20	Lead	do	0	90
21	Mushrooms, all qualities	do	5	00
	Oil:			
22	Fish	do	0	30
23	Seed	do	1	65
	Paper:			
24	Writing	do	3	00
25	Inferior	do	1	00
26	Pease, beans, and pulse of all kinds	do	0	30
27	Peony bark, Botanpi	do	3	75
28	Potatoes	do	0	15
29	Rags	do	0	12
30	Saké, or Japanese wines or spirits	do	0	90
	Seaweed:			
31	Uncut	do	0	30
32	Cut	do	0	60
	Seeds:			
33	Rape	do	0	45
34	Sesamum	do	0	90
35	Sharks' fins	do	1	80
36	Shrimps and prawns, dried salt	do	1	80
	Silk:			
37	Raw and thrown	do	75	00
38	Tama or Dupioni	do	20	00
39	Noshi or skin silk	do	7	50
40	Floss silk	do	20	00
	Cocoons:			
41	Pierced	do	7	00
42	Unpierced	do	12	00
43	Waste silk and waste cocoons	do	2	25
44	Silk-worms' eggs	Sheet	0	07½

EXPORT DUTIES—Continued.

CLASS 1.—*Specific duties*—Continued

No.	Articles.	Per.	Boos.	Cents.
45	Soy	100 catties	0	45
46	Sulphur	do	0	30
47	Tea	do	3	50
48	Tea, quality known as "Ban cha"	do	0	75
	Tobacco:			
49	Leaf	do	0	75
50	Cut or prepared	do	1	50
51	Vermicelli	do	0	45
	Wax:			
52	Vegetable	do	1	50
53	Bees	do	2	50

CLASS II.—*Duty-free goods.*

Gold, silver, and copper, coined; gold and silver, uncoined, of Japanese production, to be sold only by the Japanese government at public auction; rice, paddy, wheat, and barley; flour made from the above.

CLASS III.—*Goods subject to an ad valorem duty of five per cent., to be calculated on their market value.*

Bamboo ware; copper; copper utensils of all kinds; charcoal; saltpeter; ginseng and unenumerated drugs; horns, deer, young or soft; mats and matting; silk dresses, manufactures or embroideries; timber, except that of Hakodadi; and all other unenumerated goods.

RULES.

RULE I.

Unenumerated imports, if mentioned in the export list, shall not pay duty under that list, but shall be passed ad valorem: and the same rule shall apply to any unenumerated export that may be named in the import list.

RULE II.

Foreigners resident in Japan and the crews or passengers of foreign ships shall be allowed to purchase such supplies of the grain or flour named in the list of exports as they may require for their own consumption, but the usual shipping permit must be obtained from the custom-house before any of the aforesaid grain or flour can be shipped to a foreign vessel.

RULE III.

The catty mentioned in this tariff is equal to the 1⅓ pounds English avoirdupois weight. The yard is the English measure of 3 feet, the English foot being one-eighth of an inch larger than the Japanese kaneshaku. The boo is a silver coin, weighing not less than 134 grains troy weight, and containing not less than nine parts of pure silver and not more than one of alloy. The cent is one hundredth part of the boo.

THE TARIFF OF GUATEMALA.

TRANSLATED AND TRANSMITTED BY CONSUL TITUS.

CHAPTER 1.

PORT DUES.

ART. 2. The captains or consignees of merchant ships which may anchor in a port of the republic shall pay two pesos (dollars) as anchorage dues, which shall not be again collected though the ship may touch in other ports of the republic.

ART. 3. The following are excepted from paying anchorage dues:
1st. Ships of war of friendly nations, and transports accompanying them, when they may be permitted to enter and anchor in the ports of the republic.
2d. Ships of the nation in their first voyage of exportation and importation.
3d. Vessels of less than 25 tons register.
4th. Ships obliged to put into the ports of the republic by storms, damage, or persecution of enemies.
ART. 4. Merchant vessels which may anchor in the ports of the republic shall pay as tonnage due 25 centavos (cents) for each ton, according to the register.
ART. 5. The following are excepted from the payment of tonnage dues:
1st. Ships of war of friendly nations, although they may disembark or tranship merchandise or specie pertaining to their respective governments.
2d. Ships of this country in their first voyage of importation or exportation.
3d. Those which may come in ballast to load with products of the country, even though they disembark not exceeding ten tons of merchandise.
4th. Those which disembark or tranship only stone-coal, or precious metals in bullion or coin.
5th. Those which bring more than twenty-five immigrants.
6th. Those which are forced to put in to one of the ports of the republic, though they tranship or disembark the whole or a part of their cargo to be re-exported.
ART. 6. Harbor and tonnage dues shall be collected in the first principal port (*puerto mayor*) to which she may come.
ART. 7. Tonnage dues shall be collected only once from ships which make voyages from one port to another of the republic; but if they touch at a foreign port or remain more than thirty days on the high seas, upon their return they shall again pay the said dues.
ART. 8. Merchant ships shall pay as roll dues 25 centavos for each person of their crew, including the captain.
ART. 9. Roll dues shall be collected in the principal ports by the administrators of the custom-house of the same.
ART. 10. Anchorage, tonnage, and roll dues shall not be collected from ships excepted from paying them by treaties or by contracts celebrated by the executive power.

CHAPTER 2.

IMPORTATION OF MERCHANDISE AND DUTIES.

SECTION 1.—*Articles the importation of which is prohibited, and classification of those of licit commerce.*

ART. 2. The importation of all classes of merchandise not excepted by the law, if allowed, without distinction as to the flag of the ship in which they are imported, or of the derivation or origin of the merchandise.
ART. 12. The importation by private individuals of the following articles is prohibited:
Apparatus for coining; balls of lead or iron, bombs, hand-grenades, and other projectiles of war; cannons or pieces of artillery; carbines, rifles, or muskets; obscene pictures, books, and objects, and those contrary to morality and good customs; false money; nitrate of potassium or saltpeter, exceeding one arroba (25 pounds); nitroglycerine and dynamite; powder of all kinds, exceeding 2 pounds; raw tobacco; manufactured tobacco, exceeding 5 pounds.
ART. 13. Merchandise imported into the republic is divided into six classes:
1st. Articles exempt from import duties.
2d. Articles paying 10 per cent.
3d. Articles paying 25 per cent.
4th. Articles paying 70 per cent.
5th. Commerce with the republics of Central America.
6th. Commerce with the Mexican Republic.
ART. 14. The appraisements established in this code shall be the basis for the collection of import duties.

SECTION 2.—*Articles exempt from import duties.*

ART. 15. The following articles are exempt from import duties:
Barbed wire and hooks for fences; animals, dead or living, for breeding; anchors and girt-lines; apparatus for producing light from carbonated hydrogen gas; rice in grain; quicksilver; boats, tackle, sails, and other necessaries for ships for the use of the ports and lakes of the republic; mineral ores; stone coal; rye; Roman cement or

hydraulic lime; diamonds and other precious stones, unmounted; edifices complete, of wood or iron; effects imported for the account of the nation or the municipalities, for the service of the public or of charitable establishments; effects introduced by diplomatic ministers resident in the republic, for their own use, provided that this privilege is reciprocal, and that the requisitions of this code are fulfilled (consuls and vice-consuls do not enjoy this exemption); baggage of passengers (by this being understood objects of their personal use and indispensable instruments of their profession or business, in quantity proportioned to the class and circumstances of the owners, and furniture already used, belonging to persons coming to establish themselves in the country); ordinary packings, when duties on the articles are not assessed on the gross weight (in bales, the packing cloth, oiled cloth, side-boards, and straps will be considered packing; in boxes, the lining of tin or zinc, the card-board, paper, and casks, if they are not expressly included in the corresponding appraisement: no blankets, sheets, or other article mentioned in the fourth and fifth sections of this chapter shall be considered as packing); iron in pigs or masses of not less than fifty pounds in weight; photographs and views of the country; fragments and rigging of shipwrecked vessels; beans; pease; guano and other manures: fuse for mines; hay and other fodders not mentioned; crucibles and other instruments for assaying metals; lodestone; fire-bricks and crucibles for founding; fresh vegetables; books, used; rough lumber; machines unknown in the country and applicable to industry or agriculture; maize; models of machines and buildings; molds for making flowers; samples of merchandise whose value does not exceed one dollar; gold and silver in bullion, dust, or coin; potatoes; periodicals, loose or bound; exotic plants and their seeds; portraits belonging to families resident in the country; seeds of flowers, vegetables, or other kinds not specified in this chapter; articles for the wharves of the ports; articles for telegraphs.

SECTION 3.—*Articles paying* 10 *per cent.*

ART. 16.—Ten per cent. on the principal value, according to original invoices, shall be collected for the introduction of the following articles:

Acids applicable to the arts and industries of the country, not included in the tariff of drugs and medicines; nautical compasses or needles; knitting-needles; crude cotton, with or without the seed; oil-cloth, or rubber-cloth for making hats; hour glasses or sand clocks; plows of all classes; hoops of wood or iron for barrels, hogsheads, &c.; tar of all kinds; barometers; barrels, pipes, and hogsheads, empty; iron pumps, with or without piping, for mines, irrigating, or fires; iron, lead, or zinc piping for aqueducts, gas works, &c.; wire masks for robbing bee-hives; geographical maps or charts; wagons or carts of all kinds, with their equipage, except harness; hand-carts of all kinds; stone paste-board (?) (carton piedra) or other inventions for roofs; barley; horse-hair; crucibles; exercise-books of writing, drawing, or mathematics for use of schools; sketches or patterns on paper for embroidery; artificial teeth; staves; axles, tires, and wheels for wagons, carts, or hand-carts; wheelbarrows; globes of all kinds for study; marble statues for models, natural size; mathematical-instrument cases; surgical-instrument cases; metal checks for use in haciendas; blacksmith's bellows; blocks for tackles, wood or iron; shoe-lasts and hat-blocks; printing materials for offices; instruments useful in the sciences, arts, and agriculture, not classified in this code; gold jewelry of at least $\frac{600}{1000}$ fine, and silver of $\frac{835}{1000}$; rushes, straw, and palm leaf for furniture or hats; sheet-iron for roofs; wool, carded or uncarded; type for printing; printed books; machines for agriculture, mining, and other arts, sciences, and industries, and also single pieces belonging to said machines; marbles, rough and without polish; mausoleums or sarcophagi of stone; wood, prepared for edifices; longitudinal measures; candle-molds; sugar-molds; music, printed and manuscript; levels; paper for printing, in sheets of at least 100 by 65 centimeters; lightning-rods and necessaries; patterns for tailors and dress-makers; rabbit or hare hair for making hats; cauldrons or boilers of iron or copper for sugar-mills; lead for roofs, in the rough or in plates; hydraulic presses for making oil or applicable to agricultural productions; lithographic stones; slates for roofing; tower clocks, their dials and bells; gold watches of at least $\frac{600}{1000}$ fine and silver ones of $\frac{835}{1000}$; platform scales for weighing more than 5,000 pounds; printers' ink; wheat; plate table service of silver of at least $\frac{835}{1000}$ fine, and of gold of $\frac{600}{1000}$; poison for curing hides; zinc in bars.

SECTION 1.—*Articles paying 25 per cent.*

ART. 17. The following articles shall pay 25 per cent. on their appraisement:

Articles.		Appraisement.	Duties.
Steel in bars or plates, unworked, gross weight	cwt.	$6 00	$1 50
Harmoniums	each.	60 00	15 00
Harness:			
For two horses, with silver ornaments	pair.	200 00	50 00
For one horse, with silver ornaments	each.	80 00	20 00
For two horses, with or without ornaments of ordinary metal	pair.	80 00	20 00
For one horse, with or without ornaments of ordinary metal	each.	32 00	8 00
For wagons, carts and plows	do.	8 00	2 00
Closed carriages with four wheels, elevated seat for driver, and lined with silk inside	each.	800 00	200 00
Same, not lined with silk	do.	500 00	125 00
Open carriages:			
Four wheels, silk lining	do.	400 00	100 00
Four wheels, not lined with silk	do.	300 00	75 00
Two wheels, all classes	do.	120 00	30 00
Four wheels, ordinary, wooden bed, for passengers	do.	200 00	50 00
Varnished leather for shoes, holsters, carriage ornaments, and other uses, with paper packings	pound.	80	20
Calf-skin leather for shoes or carriage awnings, paper packings	do.	64	16
Leather of sheepskin, goat, chamois, morocco, buffalo, sole leather, upper leather, and other hides, without hair and without varnish, not specified in this code, with paper packing	pound.	40	10
Carriage axles and springs, net weight	do.	28	07
Elastic of all kinds, for shoes	yard.	40	10
Tin, in bars or plates, gross weight	cwt.	10 00	2 50
Thread of wool, for embroidery or wearing, including weight of packings	pound.	1 00	25
Thread, yarn, or wicking of cotton, crude or bleached, for wearing, gross weight	pound.	20	05
Thread, yarn, of red cotton, gross weight	do.	50	12½
Thread, yarn, of other colors, gross weight	do.	36	09
Sheet tin, gross weight	do.	06	01½
Pianos:			
Grand	each.	700 00	175 00
Half grand	do.	400 00	100 00
Upright, all classes	do.	300 00	75 00
Square, triple stringed	do.	280 00	70 00
Square, double stringed	do.	100 00	25 00
Square, single stringed or monochord	do.	30 00	7 50
Empty sacks, for exporting fruits of the country	do.	20	05

SECTION 5.—*Articles paying 70 per cent.*

FIRST PART.

ART. 18. The following articles shall pay 70 per cent. on their principal value, according to original invoices: Empty boxes, work-boxes, and card-cases of all classes; music-boxes; belts of classes not specified; pencil drawings and prints of all classes, with or without frames; small statues, of whatever material, for ornaments; flasks or liquor-cases of all kinds; musical instruments, not specified in the second part of this section; flat tombstones; picture-frames of all sizes; false jewelry, not specified in the second part of this section; clocks, for wall or table, or watches of metal or of false gold or silver.

SECOND PART.

ART. 19. The following articles shall pay 70 per cent. on their appraisement:

Articles.		Appraisement.	Duties.
Beads, bugles, garnets, &c., of glass or metal, including weight of packing.	pound	$0 50	$0 35
Fans:			
Ivory	dozen	24 00	16 80
Paper	do.	2 00	1 40
Other materials	do.	12 00	8 40
Comforters of knit wool, pure or mixed, with or without ornaments for women and children, with weight of packings (card board)	pound.	2 00	1 40
Olive oil:			
In bottles, gross weight	cwt.	6 00	4 20
In any other packing	gallon.	80	56

Articles.		Appraisement.	Duties.
Whale oil	gallon	$0 80	$0 56
Linseed oil	do	60	42
Animal oils, for machinery	do	40	28
Naphtha, petroleum, gasoline, and kerosene, gross weight	cwt.	3 00	2 10
Accordions:			
Of more than ten keys, with bells or other accessories	each	1 50	1 05
The same, without bells	do	1 00	70
Up to ten keys, with bells or other accessories	do	60	42
The same, without accessories		30	21
Cotton ornaments for clothes, with weight of packing	pound	1 00	70
Woolen or mixed goods for clothes	do	2 00	1 40
Pure or mixed silk for clothes	do	6 00	4 20
Brandy of all classes and in whatever packing, up to 20° Beaumé	bottle	90	63
Straight or curved needles for sacks, &c	M	3 00	2 10
Cloak needles	do	40	28
Steel needles of all numbers and classes for dressmakers and tailors	do	30	21
Alembics (stills) of all kinds, net weight	pound	50	35
Wire:			
Bronze or copper, of all sizes, gross weight	cwt.	20 00	14 00
Iron, ordinary, for lattice work, gross weight	do	6 00	4 20
Iron, finer, for sieves, cards, and other uses, gross weight	do	10 00	7 00
Iron, for flowers	do	15 00	10 50
Iron, steel, all sizes	do	40 00	28 00
Gilt or plated, in small boxes or reels, for cords and other uses, gross weight, pound		60	42
Cotton covered, for dressmakers or florists, gross weight	pound	30	21
Silk-covered	do	50	35
Priests' white gowns, worked or embroidered	each	10 00	7 00
Priest's white gowns, of muslin or cotton lawn, or linen with or without ornaments, each		5 00	3 50
Pins, gross weight	pound	40	28
Brussels carpets, rough or felted, gross weight	do	30	21
Imitation Brussels carpets, stamped, gross weight	do	15	10½
Imitation Brussels carpets, rough or woven, gross weight	do	20	14
Cotton prepared for lining of clothes or other uses	do	20	14
Almonds:			
With shell, gross weight	pound	10	07
Without, gross weight	do	20	14
Mortars of marble, stone, or glass, up to 15 inches diameter	each	60	42
The same, of larger diameter	do	80	56
Pillows:			
Feathers	pound	3 00	2 10
Hair or wool	do	2 00	1 40
Curry combs, iron	dozen	2 00	1 40
Alpacas:			
Of wool, or mixed with cotton, plain, worked, black or colored, ordinary up to 36 inches wide	yard	20	14
Same, medium and fine	do	30	21
Of wool and silk, black or colored, up to 36 inches wide	do	50	35
Canary seed, gross weight	cwt.	8 00	5 60
Cruet stands:			
Of German silver, copper, bronze, or other metals, plain of from four to seven cruets	each	3 00	2 10
Same, worked	do	6 00	4 20
Of wood or papier-maché, of from two to four cruets	do	1 00	70
Same from five to seven cruets	do	2 00	1 40
Rings:			
Metal or composition, with or without stones	gross	60	42
Of doublé, plaqué, or other kind, medium fine	do	3 00	2 10
Of wood, bone, or gutta-percha, for napkins	dozen	60	42
Of metal or ivory, for napkins	do	2 00	1 40
Spectacles:			
Without mountings or springs, most ordinary kind	dozen	40	28
Without mountings, with or without springs, with handles of deer horn or buffalo	dozen	2 00	1 40
The same, with handles of tortoise shell, pearl, or metal, gilt or plated	do	5 00	3 50
Or little mirrors, with mountings of iron, white or yellow metal, deer or buffalo horn, or steel, of two glasses, ordinary	dozen	1 00	70
Same, fine	do	5 00	3 50
Same, of four glasses, ordinary	do	2 00	1 40
Same, of four glasses, fine	do	5 00	3 50
Of wire gauze, for the road	do	3 00	2 10
Or monocular lenses, with handles of buffalo horn	do	2 00	1 40
Same, with handles of ivory, pearl, tortoise shell, gilt, or plated metal	do	5 00	3 50
Opera glasses:			
Monocular, of pearl, tortoise shell, ivory or gilt or plated metal	each	2 00	1 40
Double, ordinary	do	4 00	2 80
Double, fine	do	6 00	4 20
Field and marine glasses all sizes	each	5 00	3 50
Fish-hooks, all sizes, gross weight	pound	30	21
Candle extinguishers:			
With springs	dozen	1 00	70
Without	do	50	35

Articles.		Appraisement.	Duties.
Chandeliers:			
Metal, gross weight	pound..	$0 40	$0 28
Glass or crystal	do....	20	14
Areometers or alcoholometers:			
Of glass	dozen..	1 00	70
Of metal	do....	3 00	2 10
Stirrup leathers	pair..	30	21
Ear drops:			
Of metal, paste, glass, rubber, or other materials, ordinary	gross of pairs..	2 00	1 40
Same, medium fine	do....	6 00	4 20
Of double or other metal, medium	do....	12 00	8 40
Packing cloth, ordinary, for bales up to 40 inches wide	yard..	05	03½
Razor-straps:			
Of one or two faces	dozen..	2 00	1 40
Up to four faces	do....	4 00	2 80
Mats:			
Of oilcloth, for decanters or other uses, assorted sizes	dozen..	1 00	70
Same, stamped or printed	do....	2 00	1 40
Of wood, tin, cardboard, or matting, painted, assorted sizes, for decanters or bottles	dozen..	3 00	2 10
Waiters or trays of papier-maché, wood, or other materials except metals and porcelain, gross weight	pound..	30	21
Saffron, dry or in oil, with weight of packing	do....	5 00	3 50
Sugar:			
Refined, gross weight	cwt..	12 00	8 40
Other classes, inferior	do...	8 00	5 60
Or Pancla (crude sugar)	do...	4 00	2 80
B.			
Balances of one plate:			
With spring and dial, weighing up to 50 pounds	each..	4 00	2 80
Same, weighing more than 50 pounds	do....	6 00	4 20
Or platform scales weighing to 500 pounds	do....	8 00	5 60
Same, weighing up to 1,000 pounds	do....	12 00	8 40
Same, weighing up to 2,000 pounds	do....	40 00	28 00
Same, weighing up to 3,000 pounds	do....	60 00	42 00
Same, weighing up to 5,000 pounds	do....	80 00	56 00
Common, of two plates, all sizes, gross weight	pound..	40	28
Or steel-yards	each..	5 00	3 50
Buckets:			
Of painted wood	dozen..	4 00	2 80
Of tin or zinc	do....	6 00	4 20
Iron, of all classes	do....	8 00	5 60
Bandanas of cotton, gross weight	pound..	50	35
Bathing tubs:			
Of tin or zinc, painted or varnished	each..	10 00	7 00
Hip baths	do....	4 00	2 80
Whalebone, or imitation	pound..	50	35
Varnish, all kinds, gross weight	do....	10	07
Canes:			
Wooden	dozen..	8 00	5 60
Other materials	do....	15 00	10 50
With sword	do....	20 00	14 00
Dressing gowns:			
Of any kind of cotton	each..	6 00	4 20
Wool, or mixed with silk or cotton	do....	12 00	8 40
Whatever kind of silk	do ...	20 00	14 00
Trunks:			
Wood, not covered with leather or zinc (tin), all sizes	each..	2 00	1 40
Same, covered with leather or zinc	do....	5 00	3 50
Or valises of leather, up to 24 inches long	do ..	2 00	1 40
Same, larger	do....	8 00	5 60
Of other materials up to 24 inches long	do....	1 00	70
Same, larger	do....	2 00	1 40
Baize:			
All colors, up to 70 inches wide	yard..	40	28
Coarse (coating), all colors, to 70 inches wide	do ...		
Wax ("Betun"), paste or liquid for shoes, gross weight	pound..	10	07
Street-door keys not of iron, brass, or copper	gross..	3 00	2 10
Balls:			
Marble, billiard	pound..	10 00	7 00
(Marbles), of stone, wood, glass, or composition, small, for children's games	M..	3 00	2 10
Pumps or piping of iron, zinc, or tin, for pipes or barrels	each..	50	35
Same, of wood	dozen..	2 00	1 40
Same, of glass, gross weight	pound..	20	14
Tassels, fringe, cords, and braids of silk, pure or mixed, with weight of packing	do....	6 00	4 20
Same, of wool, pure or mixed, with weight of packing	do....	2 00	1 40
Same, of cotton, with weight of packing	do....	1 00	70
Boots:			
For men, calf or patent leather	pair..	3 00	2 10
Riding, of all classes	do....	5 00	3 50

Articles.		Appraisement.	Duties.
Gaiters:			
All kinds, with elastic, for men	pair..	$2 50	$1 75
Same, without elastic	do....	1 50	1 05
Of silk, with or without elastic, for women	do....	2 50	1 75
Of cloth or leather, for women	do....	1 60	1 12
And shoes, low, all kinds, for children, up to 17 centimeters inside	do....	40	28
Same, for misses, to 22 centimeters inside	do....	80	56
Same, for boys, to 23 centimeters long inside	do....	90	63
Bottles:			
Earthenware or pewter	dozen..	3 00	2 10
Glass or metal, covered or not, for travelers	do....	6 00	4 20
Glass, ordinary, for wines or liquors	do....	30	21
Demijohns, glass, all sizes, covered or not	do....	3 00	2 10
Buttons:			
Porcelain, including weight of cards	pound..	20	14
Glass	do....	30	21
Bone	do....	15	10½
Pearl shell	do....	40	28
Metal	do....	1 00	70
Silk	do....	6 00	4 20
Wool	do ..	2 00	1 40
Cotton	do....	1 00	70
Other materials	do....	1 50	1 05
Pitch or tar, common, gross weight	cwt..	2 00	1 40
Brushes, all kinds, painting, gross weight	pound..	10	07
Brooches (hooks), assorted, for cloaks	gross..	2 00	1 40
Brooches, hooks and eyes, all kinds, with weight of cards	pound..	50	35
Crape (Burato), of silk, up to 26 inches wide	yard..	40	28
C.			
Hair:			
Human, not manufactured	pound..	10 00	7 00
Same, or imitation, manufactured, with weight of packings	do....	15 00	10 50
Bridles:			
Of ordinary leather, single reins	dozen..	7 00	4 90
Same, double reins	do....	10 00	7 00
Same, with bosses or other ornaments of metal, single reins	do....	15 00	10 50
Same, with double reins	do....	18 00	12 60
Cocao (cocoa), gross weight	cwt..	7 00	4 90
Chains:			
Bronze, gross weight	pound..	40	28
Iron, gross weight	cwt..	16 00	11 20
Chests or coffers, iron, strong, all kinds, gross weight	pound..	10	07
Socks:			
Cotton, ordinary, for men	dozen..	1 80	70
Same, medium and fine	do....	1 50	1 05
Cotton, for children, to 5 inches foot	do....	30	21
Cotton, youths, to 8 inches in the foot	do....	50	35
Wool, for children, to 5 inches foot	do....	40	28
Wool, boys, to 8 inches in the foot	do....	80	56
Wool or linen, pure or mixed, ordinary, for men	do ..	1 20	84
Same, medium and fine	do....	2 50	1 75
Silk, pure or mixed, for men	do....	6 00	4 20
Same, for children, to 5 inches foot	do....	3 00	2 10
Same, for youths, to 8 inches foot	do....	5 00	3 50
Calico, cotton, gross weight	pound..	30	21
Shoe horns, of deer horn, bone, or metal	dozen..	1 00	70
Drawers:			
Cloth or cotton, knit	dozen..	4 00	2 80
Cloth or half wool, knit	dozen..	6 00	4 20
Linen, pure or mixed	do ..	8 00	5 60
Silk, pure or mixed	do....	20 00	14 00
For youths, half the duties specified, according to the class.			
Shirts:			
Cotton, colored	dozen..	5 00	3 50
Linen	do....	10 00	7 00
Cotton, white, with or without linen bosom	do....	8 00	5 60
Same of ordinary linen	do....	12 00	8 40
Same, superior	do....	25 00	17 50
Flannel or other woolen stuff	do....	10 00	7 00
For youths, half the duties specified, according to the class			
Undershirts:			
Cotton, knit	dozen..	3 00	2 10
Woolen, knit, pure or cotton mixed	do....	4 50	3 15
Flannel	do....	7 00	4 90
Silk, pure or mixed	do....	20 00	14 00
For youths, half the duties specified, according to the class.			
Bells, gross weight	pound..	40	28
Candlesticks:			
Of gilt or plated metal, or plaqué, plain or worked, up to 8 inches high, ordinary, for one light	dozen..	5 00	3 50
Same, up to 12 inches high	do ...	10 00	7 00
Same, up to 18 inches high	do....	20 00	14 00

Articles.		Appraisement.	Duties.
Candlesticks:			
Same, up to 8 inches for two lights	dozen..	$12 00	$8 40
Same, up to 12 inches for two lights	do....	24 00	16 80
Same, up to 18 inches for two lights	do....	30 00	21 00
Same materials, fine class, for one light, up to 8 inches high	do....	15 00	10 50
Same, up to 12 inches high	do....	20 00	14 00
Same, up to 18 inches high	do ..	30 00	21 00
Same, up to 8 inches for two lights	do....	25 00	17 50
Same, up to 12 inches for two lights	do....	36 00	25 20
Same, up to 18 inches for two lights	do ..	45 00	31 50
Same material for more than two lights. These will be appraised, adding one-third of the preceding appraisement for each light more than two, according to class.			
More than 18 inches high for one light	pair..	5 00	3 50
More than 18 inches for two lights	do	7 00	4 90
More than 18 inches for three or five lights	do....	10 00	7 00
With porcelain, crystal, stone, or metal bottoms, two lights	do	3 00	2 10
Same, for three or five lights	do....	7 00	4 90
Same, for more than five lights	do....	10 00	7 00
Cinnamon:			
With weight of bag	pound..	50	35
Ordinary, with weight of bag	do....	30	21
Spangles, embroidery, &c., false, gilt or plated, with weight of packing	do....	50	35
Canvas of cotton or linen for embroidery, up to 36 inches wide	yard..	05	03½
Cloaks:			
Cloth, with or without capes, with or without woolen or cotton lining	each..	15 00	10 50
Same, with silk lining	do....	30 00	21 00
Or ponchos, waterproof, with or without hoods or leggins, ordinary quality	do....	4 00	2 80
Same, superior quality	do....	6 00	4 20
Of any silk stuff, for women	do....	10 00	7 00
Crayons, black or of colors for painting	gross..	80	56
Masks, wire, for fencers	dozen..	6 00	4 20
Tortoise shell, in shell or leaf	pound..	1 20	84
Table cloths:			
Of damask or other silk	square yard..	1 00	70
Of woolen stuff, shag or felt	do....	50	35
Of any kind of cotton	do....	20	14
Cardboard:			
Ordinary	cwt.	4 00	2 80
Varnished, or parchment, for visiting cards, diplomas, &c	pound..	20	14
Coats:			
Cloth or cassimere, without embroidery, for military	each..	10 00	7 00
Same, embroidered with gold or silver	do....	40 00	28 00
Cassimere:			
Of wool, pure or mixed with cotton, ordinary, up to 30 inches wide	yard..	40	28
Same, ordinary, up to 70 inches wide	do....	90	63
Same, medium fine, up to 30 inches wide	do....	70	49
Same, medium fine, up to 70 inches wide	do....	1 50	1 05
Of wool, fine, up to 30 inches wide	do....	1 30	91
Of wool, fine, up to 70 inches wide	do....	2 60	1 82
Of wool, superfine, up to 30 inches wide	do....	1 50	1 05
Of wool, superfine, up to 70 inches wide	do....	3 00	2 10
Cassinette and mixtures:			
Of wool and cotton, simple, up to 30 inches wide	yard..	30	21
Same, up to 70 inches wide	do....	60	42
Covers of lead, for bottle corks	M..	2 00	1 40
Chasubles:			
Of any silk stuff, pure or mixed, without embroidery or jewels, with ordinary lace (galones)	each..	10 00	7 00
Of lasting or brocade, without embroidery or jewels, with false lace	do....	15 00	10 50
Same, with embroidery, jewels fine or false, and fine lace	do....	40 00	28 00
Bedsteads:			
Bronze, gross weight	pound..	40	28
Iron, with metal or bronze ornaments	do....	15	10½
Iron, ordinary, gross weight	cwt....	16 00	11 20
Brushes:			
Tooth, bone handle, ordinary	dozen..	40	28
Tooth, ivory or pearl handles	do....	2 00	1 40
Shoe	do	70	49
Clothes	do....	4 00	2 80
Hair	do....	2 00	2 10
Nail	do....	1 00	70
Shaving	do....	2 00	1 40
Scrubbing	do....	1 00	70
Currying	do ..	2 00	1 40
Planes, for carpenters	pound..	20	14
White wax:			
Pure or mixed, not manufactured, gross weight	pound..	40	28
In candles	do....	70	49
In flowers, images, &c., gross weight	do....	1 50	1 05
Beer, all classes, in any kind of package	bottle..	20	14

Articles.		Appraisement.	Duties.
Vests:			
Cotton	each..	$1 00	$0 70
Linen or woolen	do....	1 50	1 05
Silk, any kind, pure or mixed	do....	3 00	2 10
Veneering, all kinds of wood, superficial foot	square foot..	05	03½
Jackets or sacks:			
Linen or cotton, pure or mixed	each..	1 50	1 05
Of alpaca	do....	2 00	1 40
Other kinds of wool, pure or mixed	do....	5 00	3 50
Of any stuff, with ornaments, for women	do ..	8 00	5 60
Whips:			
Ordinary	dozen..	5 00	3 50
Fine	do....	10 00	7 00
Coachmen's	do....	12 00	8 40
Cap nipples for pistols or guns	gross..	2 00	1 40
Chocolate in paste, with weight of packing	pound..	50	35
Cigar cases:			
Rush (Panama), ordinary	dozen..	1 00	70
Rush, medium	do....	2 00	1 40
Rush, fine	....	4 00	2 80
Leather	do....	1 60	1 12
Materials not mentioned	do....	1 50	1 05
Mother-of-pearl, tortoise shell, or metal	do....	2 00	1 40
Cigarettes, with weight of packing	pound..	7 00	4 90
Cigars, with weight of packing	do ..	7 00	4 90
Cinches:			
Cotton, for saddles	gross pair..	3 00	2 10
Wool or flax	do....	5 00	3 50
Belts, cotton, white or colored, gross weight	pound..	40	28
Belts or ribbons of pure silk, with weight of cardboard, paper, &c., for packing	pound..	8 00	5 60
Same, mixed, with weight of cardboard, paper, &c., for packing	do....	4 00	2 80
Sword belts:			
Of leather or patent leather, with metal garnitures, ordinary, for sabers	dozen..	10 00	7 00
With gold embroidery on silk, with gilt garnitures, for sabers and swords	do....	60 00	42 00
Leather, for pistol or revolver	do....	7 00	4 90
Leather or other materials for other uses	do....	1 00	70
Cambric	yard..	10	07
Of silk sleeves 7 to 40 inches wide	do....	50	35
Cloves, spices, gross weight	pound..	10	07
Same, ground, gross weight	do....	30	21
Nails:			
Iron, gross weight	cwt..	4 00	2 80
Iron, horseshoe, gross weight	do....	5 00	3 50
Or tacks, up to 1 inch, gross weight	do....	8 00	5 60
Or tacks of bronze, copper, or iron, with copper heads	pound..	40	28
Copper:			
In bars or plates, gross weight	do....	15	10½
In nails, candlesticks, chandeliers, rings, chains, cow bells, and domestic utensils, not elsewhere given, gross weight	pound..	40	28
Sky rockets, and all artificial fires, gross weight	do....	30 00	21 00
Coverlets and blankets:			
Wool or cotton, up to 2 varas (66 inches English) wide, ordinary	each..	50	35
Same, medium fine	do....	70	49
Same, fine	do....	1 00	70
Same, more than 2 varas wide, common	do....	70	49
Same, more than 2 varas wide, medium fine	do....	1 00	70
Same, fine	do....	1 50	1 05
Network, cotton, with weight of packing	pound..	2 00	1 40
Network, wool, with weight of packing	do....	3 00	2 10
Network, silk, with weight of packing	ounce..	45	31½
Nankin:			
Of linen, pure or mixed, up to 36 inches in width	yard..	10	07
Of cotton, gross weight	pound..	30	21
Collars:			
Leather, for dogs	dozen..	2 00	1 40
Metal, for dogs	do....	4 00	2 80
Necklaces:			
Coral, with weight of packing	pound..	10 00	7 00
Glass, composition, or other ordinary material, with weight of packing	do....	60	40
Cumin seed, gross weight	cwt..	8 00	5 60
Compasses:			
Iron, gross weight	pound..	20	14
Copper or bronze, gross weight	do....	40	28
Mother-of-pearl, unmanufactured, gross weight	do....	10	07
Canned or preserved goods, meat, fish, vegetables, soups, sauces, pickles, sausage, ham, pork, olives, capers, &c., with packings of earthenware or wood, gross weight	pound..	10	07
Same, in other packings	do....	15	10½
Coral:			
Unmanufactured, gross weight	do....	4 00	2 80
Worked, polished, or cut, in beads, &c., necklaces, with weight of packings	do....	10 00	7 00

Articles.		Appraisement.	Duties.
Necklaces:			
Pure silk, with weight of packing	pound..	$8 00	$5 60
Mixed, with weight of packing	do....	4 00	2 80
Wool, pure or mixed, with weight of packing	do....	2 00	1 40
Linen, pure or mixed, with weight of packing	do....	1 50	1 05
Cotton, pure or mixed, with weight of packing	do....	1 00	70
Corks, all kinds, gross weight	do....	30	21
Cords, hemp or pita, gross weight	do....	10	07
Corsets, all kinds and sizes	dozen..	10 00	7 00
Glass cutters, steel	do....	2 00	1 40
Cuts of leather for shoes, with weight of packing	do....	1 00	70
Cuts of cotton for clothes, embroidered or ornamented, with weight of cards and paper	dozen..	1 00	70
Cuts of woolen, same, with weight of cards and paper	do....	2 00	1 40
Cuts of silk, same, with weight of cards and paper	do....	6 00	4 20
Linen:			
Pure or cotton mixed, crude or listed, ordinary, and medium fine, up to 80 inches wide	yard..	50	35
Same, up to 36 inches wide	do....	25	17½
Same, fine and superfine, up to 80 inches wide	do....	1 00	70
Same, fine and superfine, up to 36 inches wide	do....	50	35
Crape:			
Silk, all colors	do....	30	21
Cotton, black, narrow for mourning	do....	15	10½
Crosses or medals of brass, tin, or composition, up to ¾ inch long	gross..	35	24½
Same, up to 1½ inches long	do....	70	49
Same, larger	do....	1 50	1 05
Knives and forks:			
Ordinary, handles of wood, deerhorn, iron or bone	dozen..	1 00	70
Fine, handles of ivory, pearl, or plaqué	do....	4 00	2 80
Carving	do....	6 00	4 20
Wood, for salads	do....	2 00	1 40
Of ivory	do....	6 00	4 20
Spoons:			
Iron, tin, or pewter, common size	gross..	3 00	2 10
Iron, tea	do....	2 00	1 40
White metal or German silver, with weight of packing	pound..	5 00	3 50
Wood, small, for sauces	gross..	4 00	2 80
Ivory, same	do....	12 00	8 40
Knives:			
Table, ordinary and medium, handles of wood, whalebone, deer-horn, or bone	dozen..	50	35
Table, fine, ivory, pearl, or plaqué handles	do....	2 00	1 40
Dessert, half the foregoing duties according to the class			
Pointed, cast-blade, ordinary, bone, deer-horn, or whalebone handles, gross weight	pound..	30	21
For the woods, ordinary, without sheath	dozen..	3 00	2 10
Same, with leather sheath	do....	4 00	2 80
Same, with metal sheath and tip	do....	6 00	4 20
Same, fine	do....	8 00	5 60
Metal, wood, or deer-horn, for cutting paper	do....	1 00	70
Same, of pearl, ivory, or bone	do....	2 40	1 68
Collars:			
Cotton or linen	do....	1 00	70
Same, embroidered, for women	do....	5 00	3 50
Strings, for guitar or violin, up to one yard long, in bundles of 30 strings	bundle..	25	17½
Hides:			
Tanned, with hair, for caps and other uses, gross weight	pound..	1 00	70
Tanned, sheepskins, white or colored, gross weight	do....	70	49

D.

Daggers, two edges:			
Without sheath	each..	2 00	1 40
With sheath	do....	3 00	2 10
Demijohns	dozen..	3 00	2 10
Damask, of wool and silk, or mixed with cotton, for furniture coverings or other uses, up to 36 inches wide	yard..	80	56
Same, double width	do....	1 60	1 12
Or brocatel of silk and cotton, ground or visible pictures, of silk, for curtains or other uses, up to 36 inches wide	yard..	1 60	1 12
Or brocade, of silk only, for same uses as the following, to 36 inches wide	do....	2 40	1 68
Of silk only, for clothes or other uses, up to 36 inches wide	do....	1 60	1 12
Or brocade, cloth, or tissue of cotton, embroidered or woven with thread of false metal to 36 inches wide	yard..	1 00	70
Same of silk, embroidered or woven with thread of false metal, to 36 inches wide	yard..	2 00	1 40
Same of silk, embroidered or woven with thread of fine metal, to 36 inches wide	yard..	4 00	2 80
Of wool, or mixed with cotton, all colors, to 28 inches wide	do....	35	24½
Same, double width	do....	70	49
White or genuine, linen or mixed with cotton, to 36 inches wide	do....	40	28

Articles.		Appraisement.	Duties.
Thimbles:			
Brass, tin, bone, or iron, for women	gross..	$0 40	$0 28
Steel, ivory, gilt, or plated, for women	do....	80	56
Iron, steel, or other metals, for tailors	do....	50	35
Snuffers:			
Iron or brass, with or without springs	gross..	9 00	6 30
Same, with ash receivers	do....	18 00	12 60
Steel or white metal, with or without springs	dozen..	3 00	2 10
Same, with ash receiver	do...	6 00	4 20
Metal, gilt, or plated, or of plaqué, with or without springs	do....	6 00	4 20
Same, with ash receivers	do ..	12 00	8 40
Diamonds, mounted for cutting glass	do....	1 00	70
Drill:			
Ordinary, for trimming clothes, up to 36 inches wide	yard..	15	10½
Of linen, or mixed with cotton or hemp, white or colored, up to 36 inches wide, ordinary	yard..	15	10½
Same, cotton mixed, medium	do...	20	14
Same, fine	do .	30	21
Cotton, white or colored, gross weight	pound..	30	21
Lasting, wool or cotton mixed, plain or worked, up to 36 inches wide	yard..	30	21
E.			
Lace:			
Cotton or linen, including weight of cardboard and papers	pound..	3 00	2 10
Silk, with weight of cards and paper	do....	8 00	5 60
Oilcloth or rubber, printed, ordinary and medium fine, up to 72 inches wide	yard..	30	21
Same, fine	do...	50	35
Printed, ordinary and medium fine, up to 36 inches wide	do....	15	10½
Same, fine	do....	25	17½
Strings, wire-covered, for guitar or violin	gross..	2 00	1 40
Same, for piano	do....	4 00	2 80
Socks, knit, wool or cotton mixed, with or without soles, for infants	dozen..	80	56
Brooms, with or without handles, straw	do ..	2 00	1 40
Shotguns, percussion-locks, ordinary and medium fine, one barrel	each..	2 50	1 75
Same, double-barreled	do...	5 00	3 50
Single-barreled, fine	do....	6 00	4 20
Same, double-barreled	do ..	12 00	8 40
Single-barreled, breech-loading, with or without accessories	do ..	20 00	14 00
Double-barreled, same	do....	30 00	21 00
Steels, ordinary, for smokers	dozen..	2 00	1 40
Enamel, in leaves, with weight of packing	pound..	2 40	1 68
Cut in figures, for embroidery and other uses, with weight of packing	do....	4 00	2 80
Emery, in powder, for silversmith	do ...	20	14
Swords or sabers, ordinary, with scabbards of leather or metal, without belts	each..	2 00	1 40
Same, with scabbard of leather or German silver, with metal tips or ornaments, or small swords, fine blade	each..	4 00	2 80
Mirrors, all classes and sizes, with or without frames, gross weight	pound..	30	21
Spermaceti, unmanufactured, gross weight	do ...	20	14
Same, in candles, gross weight	do....	40	21
Sponges, of all kinds	do ..	4 00	2 80
Tin, in domestic utensils, gross weight	do....	20	14
Spurs, brass, steel, or iron, with or without straps, by pairs	dozen..	4 00	2 80
Shoe pegs, gross weight	cwt..	4 00	2 80
Stearine:			
In cakes, gross weight	pound..	15	10½
In candles, with weight of box	do...	20	14
Mats, rush or straw, for floors, 36 inches wide	yard..	40	28
Stirrups:			
Iron	dozen pair..	4 00	2 80
White or yellow metal	do .	6 00	4 20
Labels for bottles or other uses	M..	2 00	1 40
F.			
Sashes:			
Cotton or texture, with weight of packings	pound..	1 50	1 05
Wool, with weight of packings	do....	2 00	1 40
Silk, pure or mixed, plain or damask-like, with or without fringe	dozen..	6 00	4 20
Silk, knit, twisted or netted, simple, with or without tassels	do....	18 00	12 60
Same, double or superior	do....	30 00	21 00
Felt:			
Woolen, up to 18 inches wide	yard..	60	42
Cotton, up to 36 inches wide	do....	30	21
Silk, up to 30 inches wide	do....	1 00	70
Filters, charcoal, for water	dozen..	4 00	.....
Flannel, thin woolen, to 30 inches wide	yard..	20	14
Flowers, artificial, mounted or unmounted, with weight of packing	pound..	10 00	7 00
Foils, iron, for fencing	dozen..	12 00	8 40
Matches, all kinds, gross weight	pound..	10	07
Flannel, woolen or mixed, up to 30 inches wide	yard..	25	17½
Same, to 70 inches wide	do....	50	35
Bits for bridles	each..	1 00	70

Articles.		Appraisement.	Duties.
Fruits:			
Canned, &c., with weight of packings, gross weight	pound..	$0 10	$0 07
Fresh	do....	05	03½
Dried, raisins, plums, &c., gross weight	do....	10	07
Bellows, hand	dozen..	6 00	4 20
Caps:			
For guns or pistols	M..	60	42
Or cartridges, breech-loading	C..	1 00	70
Cigarette-holders, of metal or any material	dozen..	80	56
Covers for shotgun, leather	do....	6 00	4 20
Same, for revolvers or pistols	do....	5 00	3 50
Petticoats, in cuts of cotton cloth, embroidered or worked, up to 8 yards long	piece..	1 50	1 05
Same, plain or with tucks	do....	1 00	70
In cuts of linen or mixed stuff, embroidered or worked, up to 8 yards long	do....	2 00	1 40
Same, plain or with tucks	do....	1 50	1 05
Made of woolen stuff	do....	3 00	2 10
Saddle-trees:			
Wood	each..	2 00	1 40
Iron	do	4 00	2 80
G.			
Saddles, men's, ordinary, without trappings	each..	10 00	7 00
Same, medium and fine	do....	20 00	14 00
Men's, ordinary, with trappings	do....	15 00	10 50
Same, medium and fine	do....	30 00	21 00
Women's, ordinary, without trappings	do....	8 00	5 60
Same, medium and fine	do....	16 00	11 20
Same, ordinary, with trappings	do....	20 00	14 00
Same, medium and fine	do....	25 00	17 50
Lace or thread, of false silver or gold, with weight of packing	pound..	4 00	2 80
Same, fine	do....	12 00	8 40
Crackers:			
Ordinary, gross weight	pound..	05	03½
Fine or sweet	do....	10	07
Gauze or percala of silk, plain or embroidered, to 30 inches wide	yard..	50	35
Same, of cotton, worked, up to 36 inches wide	do....	10	07
Same, cotton, plain, ordinary white, up to 40 inches wide	do....	10	07
Same, medium and fine	do....	15	10½
Cotton, embroidered, up to 30 inches wide	do	20	14
Globes, glass, for lamps, gross weight	cwt..	12 00	8 40
Gum or rubber erasers	pound..	80	56
Gro, levantine, satin, taffety, and other mixed silk stuff, not specified, up to 30 inches wide, simple quality	yard..	40	28
&c., same stuffs, double class	do....	70	49
Same, pure silk, simple class, to 30 inches wide	do....	70	49
Same, double class, superior	do	1 40	98
Gloves:			
Leather, ordinary	dozen pairs..	2 50	1 75
Leather, ordinary, or gauntlets	do....	4 00	2 80
Kid or other fine skin	do....	3 00	2 10
Buckskin, stuffed with hair, for fencing or boxing	do	10 00	7 00
Silk knit	do	3 00	2 10
Woolen	do....	2 50	1 75
Cotton	do....	1 00	70
For children, half of the foregoing duties, according to class.			
Guards, lists, &c., cotton or linen, embroidered, with weight of cards and papers	pound..	6 00	4 20
H.			
Hatchets, gross weight	pound..	20 00	14
Flour, of wheat, gross weight	cwt..	2 50	1 75
Buckles:			
Iron, for straps	gross..	80	56
Steel, or galvanized iron, copper, or other galvanized metal, for pantaloons, vests, &c	gross..	1 00	70
Horseshoes, gross weight	cwt..	16 00	11 20
Iron work, for doors, windows, furniture, &c, gross weight	do....	16 00	11 20
Hardware:			
Ordinary, as hoes, machetes, sickles, shovels, pikes, picks, anvils, pruning-hooks, large screws, and other instruments for workmen and agriculturists, not mentioned in this section, gross weight	cwt..	7 00	4 90
Fine, as fluting-irons, steels for sharpening, nippers, augers, burino, carpenters' tool-chests, planes, chisels, compasses, coopers' knives, screw-drivers, squares, rasps, punches, hatchets, knives for planes, saws, hammers, files, gimlets, tweezers, forceps, trowels, and other instruments for artisans not mentioned in this section, gross weight	pound..	20	14
Iron:			
Forged in brass, plates, &c., gross weight	cwt..	3 00	2 10
Manufactured, in domestic implements, or for other uses, not specified in this section, gross weight	pound..	16 00	11 20
Same, in implements, tinned or lined with porcelain or china, gross weight	pound..	20	14

Articles.		Appraisement.	Duties.
Thread, cotton, in clews, balls, or skeins, for sewing, embroidering, and crocheting, including weight of cardboard and papers	pound..	$0 50	$0 35
Cotton, on spools, to 100 yards	gross..	1 00	70
Hemp, for shoes and sacks, gross weight	pound..	20	14
Same, fine, in balls, or wound on cardboard, for tailors, including weight of cards and paper	pound..	60	42
Linen, for sewing or embroidery, spools, to 100 yards	gross..	1 50	1 05
Same, in skeins or balls, for embroidering, with weight of packings	pound..	1 00	70
Silk, for sewing or embroidering, on spools, to 100 yards	gross..	5 00	3 50
Blades of swords or sabers, without sheaths or handles	dozen..	10 00	7 00
Tin, sheet, manufactured, in domestic utensils or for other uses, gross weight	pound..	20	14
Holland, of linen, to 36 inches wide, ordinary	yard..	30	21
Same, medium and fine	do....	50	35
I.			
Chintz, cotton, gross weight	pound..	40	28
"Irlanda" linen, pure or mixed, with cotton, to 36 inches wide, ordinary	yard..	30	21
Same, medium and fine	do....	50	35
J.			
Soap:			
Ordinary, in balls or bars, gross weight	pound..	10	07
In cakes, scented or not, ordinary and fine	do....	30	21
Headstalls for halters, all kinds	dozen..	10 00	7 00
Sirups or sherbets, all classes	bottle..	40	28
Rigging tackle, not intended for the use of the ports, gross weight	pound..	10	07
Jars and basins:			
Of delf. (*See* Delf, letter L.) Of glass. (*See* Glass, letter V.) Iron, tin, or pewter. (*See* Iron, manufactured, letter H.) Sheet tin. (*See* Tin, letter H.) Galvanized or of white or yellow metal. (*See* Table service, letter V.)			
Frieze, coarse, imitation of that made in this country, wool or cotton mixed, to 36 inches wide	yard..	50	35
Syringes, glass, any shape, large	dozen..	8 00	5 60
Same, small	do....	4 00	2 80
Metal, any shape, large	do....	15 00	10 50
Same, small	do....	7 00	4 90
Rubber, any shape or size, with tube	do....	9 00	6 30
Same, without tube	do....	3 00	2 10
In sets, made of bone and wood	set....	60	42
In sets, made of bone and ivory	do....	2 00	1 40
Lottery, game, in card-board boxes	dozen..	3 00	2 10
Same, in wooden boxes	do....	5 00	3 50
Chequers, (checkers, draughts), board of card	do....	3 00	2 10
Same, board of wood	do....	5 00	3 50
Chess:			
Pieces of wood, bone, papier-maché, or any other material	set....	2 00	1 40
Pieces of ivory, board to 8 inches	do....	3 00	2 10
Same, board larger than 8 inches	do....	5 00	3 50
Toys, all kinds, for children, gross weight	pound..	40	28
L.			
Sealing-wax:			
Colored, with weight of packings	pound..	80	56
Ordinary, for sealing bottles, with weight of packings	do....	20	14
Bricks, clay or delf, glazed or unglazed, gross weight	cwt....	50	35
Lamps of all kinds, with necessaries, gross weight	pound..	40	28
Bunting:			
Pure, or cotton mixed, of all colors, to 36 inches wide	yard..	20	14
Mixed with silk	do	30	21
Pencils:			
Ordinary, encased in wood	gross..	80	56
Same, fine	do....	90	63
Stone, for drawing	do	80	56
Slate, for drawing	M..	1 20	84
Pencil-cases:			
Wood, bone, or gutta-percha	gross..	2 50	1 75
Metal, ordinary	dozen..	1 00	70
Precious metals. (*See* Fine jewelry.)			
Brass. (*See* Copper, letter C.)			
Letters, receipts, or invoices, lithographed in blank, gross weight	pound..	20	14
Coats:			
Of cloth, cassimere, or other woolen stuff	each..	10 00	7 00
Of any cotton or linen stuff	do....	2 50	1 75
Books:			
Of cigarette-paper	1,000 leaves..	10	07
Of gold or silver, false, for gilding, with weight of paper	pound..	2 40	1 68
Same, fine quality	do....	8 00	5 60
Same, memorandums, blank, gross weight	do	20	14
Liqueurs, sweet, as Cominillo, Curaçoa, Chartreuse, Anisette, bitters, &c	bottle..	70	49

Articles.		Appraisement.	Duties.
Garters:			
Silk, pure or mixed	dozen pairs..	$2 40	$1 68
Same, small, for children	do....	1 40	98
Of wool or cotton	do....	70	49
Same, small, for children	do....	40	28
Toothpicks:			
Ivory, pearl, or tortoise-shell	gross..	6 00	4 20
Bone	do....	3 00	2 10
Quill	do....	40	28
Lawn, cambric, tarleton, &c., plain and ordinary, to 40 inches wide	yard..	10	07
Same, medium and fine	do....	15	10
Same, worked or embroidered in weaving, ordinary, to 40 inches wide	do....	15	10
Lanterns, gross weight	pound..	40	28
Canvas, linen or cotton, gross weight	cwt..	28 00	19 60
Delf:			
Ordinary, gross weight	do....	6 00	4 20
Medium fine	do....	8 00	5 60
Fine, or imitation of porcelain, gross weight	do....	12 00	8 40
Or porcelain	do....	20 00	14 00
Hops, gross weight	do....	15 00	10 50
Lustring of cotton, with threads of metal, ordinary, to 26 inches wide	yard..	1 00	70
Same, with threads of fine gold or silver, to 26 inches wide	do....	2 00	1 40
M.			
Matches, gross weight	cwt..	7 00	4 90
Calico, jeans, germanic, irlanda, white brilliantine, damask, bogatana, imperial, crea royal, irlanda of cotton or other similar stuffs, gross weight	pound..	30	21
Sleeves, with or without embroidery, for women	dozen pairs..	3 00	2 10
Penstalks:			
Of wood, bone, tin, gutta-percha, or glass	gross..	1 20	84
Tortoise shell, pearl, ivory, or metal	do....	4 00	2 80
Handles, of delf, glass, or porcelain, for doors, trunks, &c	dozen..	3 00	2 10
Same, copper or bronze, gross weight	pound..	40	28
Cotton shirting, crude or bleached, bed-ticking, linen petticoats, creas for mattresses, of cotton and other similar stuffs, gross weight	pound..	20	14
Lard, gross weight	do....	05	03½
Butter, gross weight	do....	10	07
Saddle-blankets, of cloth, linen, or felt	dozen..	8 00	5 60
Ivory:			
Crude	pound..	4 00	2 80
In leaves	do....	5 00	3 50
Rushlights for kitchen or stable, in boxes	dozen boxes..	40	28
Marble, polished, in slabs	cwt..	1 00	70
Masks:			
Wire	dozen..	6 00	4 20
Cardboard	do....	1 00	70
Or half-masks of silk	do....	4 00	2 80
Wicks:			
Of paper or cotton, for smokers, gross weight	do....	80	56
For lamps	do....	20	14
Medals. (*See* Crosses, letter C.)			
Stockings:			
Cotton, ordinary and medium	dozen pair..	1 50	1 05
Same, fine	do....	2 50	1 75
Linen	do....	4 00	2 80
Wool, ordinary or fine	do....	3 00	2 10
Silk, pure or mixed	do....	9 00	6 30
For children, to 5 by 8 inches in the foot. (*See* Socks, letter C.)			
Merino:			
Wool or cotton mixed, ordinary, to 36 inches wide	yard..	25	17½
Same, medium and fine	do....	40	28
All wool, double quality, to 36 inches wide	do....	90	63
Molasses, sirups, gross weight	cwt..	2 00	1 40
Moldings, of wood, stuccoed, gilt, or veneered, gross weight	pound..	10	07
&c., of brass, for curtains, gross weight	do....	1 00	70
Mills, coffee, gross weight	cwt..	16 00	11 20
Mustard, prepared or in powder, gross weight	pound..	15	10½
Furniture:			
Upholstered with silk or hair cloth, gross weight	pound..	50	35
Upholstered with wool or cotton	do....	30	21
Without upholstering of stuff, set up or in pieces, gross weight	do....	25	17½
Ammunition:			
Of lead, all classes, gross weight	pound..	10	07
Pouches or flasks, of leather, horn, or metal	dozen..	8 00	5 60
Muslin or cambric:			
Of cotton, stamped, gross weight	pound..	50	35
Of wool or mixed, to 36 inches wide	yard..	20	14
N.			
Playing cards:			
Ordinary paper, double	gross..	4 00	2 80
Fine, single, linen	do....	8 00	5 60
Small, for children, half of the foregoing rates, according to class.			

Articles.		Appraisement.	Duties.
Razors:			
Ordinary	dozen..	$1 25	$0 87½
Fine	do....	3 00	2 10
Same, in dressing cases or boxes, with weight of case or box	pound..	4 00	2 80
Penknives or pocket-knives, of one or two blades, ordinary	dozen..	1 00	70
Same, medium fine	do....	1 50	1 05
Fine	do....	2 00	1 40
Ordinary, of more than two blades, with or without other appendages	do....	1 50	1 05
Same, medium fine	do....	3 00	2 10
Fine	do....	5 00	3 50
Nuts, gross weight	pound..	10	07
O.			
Wafers for letters, with weight of packings	pound..	50	35
Ochre, gross weight	cwt..	4 00	2 80
Eyelets for clothing or shoes, with weight of packings	pound..	50	35
Batiste, or linen lawn, pure or cotton-mixed, to 40 inches wide	yard..	40	28
Same, of cotton, 40 inches wide	do....	10	07
Tinsel, gold and silver	pound..	2 00	1 40
Oysters and clams, in vessels of wood or earthenware, gross weight	do....	10	07
Same, in other packings, gross weight	do....	15	10½
P.			
Candlesticks:			
Of tin	dozen..	5 00	3 50
Of brass or bronze, gross weight	pound..	40	28
White metal	dozen..	8 00	5 60
Corduroy. (*See* Velvet, letter T.)			
Pantaloons:			
Cloth or cassimere	pair..	4 00	2 80
Linen or cotton	do....	2 00	1 40
Cloth, or cassimere, of wool or cloth for ladies, to 52 inches wide	yard..	1 00	70
Wool or cotton, mixed, ordinary, to 52 inches wide	do....	1 00	70
Same, medium fine	do....	1 50	05
Woolen, fine	do....	2 50	1 75
Same, superfine	do....	3 00	2 10
Same, to 72 inches wide	do....	4 00	2 80
Summer, or grain of gold, to 36 inches wide	do....	30	21
Beaver, for overcoats, to 52 inches wide	do....	2 50	1 75
Towels, linen or cotton mixed, to 45 inches long	dozen..	3 00	2 10
Same, to 54 inches long	do....	4 00	2 80
Same, of linen, grained or raised	do....	5 00	3 50
Same, cotton, to 45 inches long	do....	2 00	1 40
Same, cotton, to 54 inches long	do....	4 00	2 80
Same, larger, will be appraised in proportion.			
Shawls, cotton, plain or stamped, up to 6 quarters square	dozen..	3 50	2 45
Same, larger	do....	5 00	3 50
Cotton, felted, to 6 quarters	do....	6 00	4 20
Same, larger	do....	8 00	5 60
Merino or swan-skin, ordinary quality, to 6 quarters square	do....	8 00	5 60
Same, larger	do....	12 00	8 40
Linen or cotton mixed, different texture and of superior quality to those mentioned, to 6 quarters square	dozen..	9 00	6 30
Same, larger	do....	15 00	10 50
Silk and hemp, or silk and cotton, to 6 quarters	do....	18 00	12 60
Same, larger	do....	30 00	21 00
Silk crape, plain, damasked, or embroidered, with weight of paper	ounce..	45	31½
Of any other stuff of pure silk not specified, with weight of paper	do....	50	35
Handkerchiefs:			
Of muslin or lawn of cotton, gross weight	pound..	50	35
Of cotton bandana, twilled in imitation of silk, or other similar stuffs, gross weight	pound..	50	35
Of madapolan or coquillo	do....	40	28
Linen, white or colored, ordinary, to 30 inches long	dozen..	2 00	1 40
Same, fine	do....	3 00	2 10
Same, mixed, will be appraised at half the foregoing, according to class, of cambric, or baptiste, of pure linen, plain or embroidered, with or without lace	dozen..	6 00	4 20
Same, mixed, half the duties of the foregoing class.			
Silk, pure, to 40 inches, with weight of packings	pound..	6 00	4 20
Silk, mixed, to 40 inches, with weight of packings	do....	3 00	2 10
Paper:			
Letter, all kinds, gross weight	pound..	15	10½
Cotton, all kinds, gross weight	do....	10	07
Linen, pure or mixed, gross weight	do....	15	10½
Linen, for cigarettes, gross weight	do....	20	14
Colored, for posters, gross weight	cwt..	7 00	4 90
Of china, gross weight	pound..	10	07
Colored, for flowers, gross weight	do....	10	07
Gilt or silver, gross weight	do....	50	35
Thick card (marquilla)	do....	20	14
Straw, brown, filter, or manila, gross weight	cwt..	2 00	1 40
Blotting, gross weight	do....	4 00	2 80

Articles.		Appraisement.	Duties.
Paper:			
Ruled for accounts, gross weight	pound	$0 15	$0 10½
Glass or parchment, gross weight	cwt.	3 00	2 10
Small, smooth, perforated, worked, or stamped, white or colored, for notes, gross weight	pound	30	21
Ruled for music	do	10	07
For binding, colored, lustrous, and marbled, gross weight	cwt.	18 00	12 60
Colored, without luster or gilt, for tapestry, gross weight	do	4 00	2 80
Same, fine	pound	10	07
Same, with luster, gilt, silver, or with figures, felt, or velvet, gross weight	do	15	10½
Visiting cards	C.	2 00	1 40
Parafline:			
In cakes, gross weight	pound	20	14
In candles, gross weight	do	30	21
Umbrellas:			
Cotton	dozen	4 00	2 80
Or parasols of cotton	do	2 50	1 75
Of taffety or silk, pure or mixed, simple	do	15 00	10 50
Same, double quality	do	25 00	17 50
Or parasols of any stuff, of silk, simple, plain, and without ornaments	do	14 00	9 80
Same, ornamented	do	24 00	16 80
Flour paste, in vermicelli, maccaroni, maizena, &c., gross weight	pound	05	03½
Lozenges, of sugar, and comfite of all kinds, except medicinal, gross weight	do	20	14
Combs, wood, horn, or gutta-percha, coarse	gross	6 00	4 20
Same, of tortoise-shell or ivory	do	1 20	84
Wigs. (*See* Hair, letter P, other list.)			
Hair robes for saddles	gross	8 00	5 60
Perfumery, ordinary, not specified in the third part of this section, gross weight	pound	30	21
Same, fine	do	50	35
Parchment in sheets, common size	dozen	3 60	2 52
Pearls, false, of wax, paste, or composition, polished, gross weight	pound	1 00	70
Blinds, Venetian and transparent, all kinds, gross weight	do	30	21
Shirts, bosoms, cotton	do	40	28
Mats for floors (petates), to 3 varas long, small ordinary	dozen	80	56
Steels for corsets	do	2 00	1 40
Pitch and fine resin, gross weight	pound	10	07
Hones for razors	dozen	6 00	4 20
Flints, all sizes, gross weight	cwt.	9 00	6 30
Grindstones, round, with or without cranks, for sharpening tools, gross weight	pound	05	03½
Pepper, black:			
In grain, gross weight	cwt.	8 00	5 60
Ground, gross weight	pound	10	07
Brushes, for painters, all sizes	dozen	1 00	70
Paint:			
In oil, gross weight	cwt.	6 00	4 20
Powder not specified in the third part of this section, gross weight	do	4 00	2 80
Piqué, or dimity, of cotton, with or without quilting, gross weight	pound	30	21
Pique, or dimity, of silk. (*See* Gro).			
Pistols:			
Pocket, single-barreled	pair	6 00	4 20
Pocket, double-barreled	do	8 00	5 60
Or revolvers of 5 to 6 shots, up to 9 inches long, including handle	each	6 00	4 20
Same, of 5 to 7 shots, longer	do	10 00	7 00
Horse, single-barreled	pair	10 00	7 00
Horse, double-barreled	do	12 00	8 40
Holsters:			
Leather, for saddles	pair	3 00	2 10
For revolvers and pistols, belt	dozen	5 00	3 50
Pens:			
Quill	M.	1 30	91
Metal or steel	gross	30	21
Gold, points only	dozen	4 00	2 80
Gold, with stalks	do	8 00	5 60
Feather dusters, to 18 inches long, including the handle	do	3 00	2 10
Same, to 24 inches	do	5 00	3 50
Same, larger	do	8 00	5 60
Spatterdashes, leather or stupp, without soles	pair	2 00	1 40
Powder-flasks, of horn, metal, or leather	dozen	6 00	4 20
Poplins, cotton, with or without hemp woof, to 30 inches wide	yard	15	10½
Wool, mixed with hemp, to 30 inches wide	do	20	14
Silk. (*See* Gro.)			
Ponchos, wool	each	5 00	3 50
Porcelain. (*See* Delf, letter L.)			
Portmonnaies, of leather or gutta-percha	dozen	1 00	70
Pearl, tortoise shell, ivory, bone, or metal	do	3 00	2 10
Presses, for copying letters	each	8 00	5 60
Tips for billiard cues, leather	C.	40	28
Tulle:			
Cotton, plain, to 36 inches wide	yard	15	10½
Same, fancy woven, to 36 inches wide	do	20	14
Same, embroidered, to 36 inches wide	do	30	21
Same, of silk, with weight of packing	pound	8 00	5 60

Articles.		Appraisement.	Duties.
Daggers, blade to 9 inches long, with or without leather scabbard	dozen..	$12 00	$11 20
Same, more than 9 inches	do....	16 00	8 40
Same, to 9 inches, with scabbards of metal or ornamental leather	do....	24 00	16 80
Same, large	do....	32 00	22 40
Cuffs, cotton or linen, for men's shirts	dozen pairs..	2 00	1 40
Q.			
Cheese, gross weight	pound..	10	07
Lamps, all kinds, with their accessories, gross weight	do....	40	28
R.			
Rappee snuff	pound..	7 00	4 90
Rebozos:			
Cotton	dozen..	15 00	10 50
Silk. (*See* Shawls, letter P.)			
Reps, or colored cotton stuffs for furniture, to 70 inches wide	yard..	70	49
Resin, ordinary, gross weight	cwt..	6 00	4 20
Springs, iron, for seats of furniture, gross weight	pound..	15 00	10½
Rosaries:			
Wood or nut-shell, ordinary	gross..	2 40	1 68
Glass or porcelain beads	do....	3 00	2 10
Other classes, superior	gross..	4 00	2 80
Russia, linen, or cotton mixed, to 36 inches wide	yard..	15	10½
S.			
Sheets, cotton, to 3 varas long	dozen..	8 00	5 60
Sago and tapioca, gross weight	cwt..	12 00	8 40
Salt:			
Common, rock, or grain, gross weight	cwt..	1 50	1 05
Refined, ground, in pockets or earthen vessels, gross weight	do....	3 00	2 10
Sausages, gross weight, in wooden or earthen packages	pound..	10	07
Salmon, gross weight, in wooden or earthen packages	do....	10	07
Sauces, gross weight, in wooden or earthen packages	do....	10	07
Same three articles in other packages, gross weight	do....	15	10½
Sandalina, of cotton, plain or twilled, gross weight	do....	40	28
Sarapes, or ponchos, wool	each..	5 00	3 50
Sardines, tin boxes, gross weight	pound..	15 00	10½
Serge:			
Silk, simple, to 36 inches wide	yard..	50	35
Same quality, double to 36 inches wide	do....	1 00	70
Wool or cotton mixed, lastin, chine, and zanela, to 36 inches wide, ordinary	do....	20	14
Same stuffs, medium and fine	do....	30	21
Tallow:			
In cakes or molded, not purified, gross weight	cwt..	7 00	4 90
Purified, gross weight	do....	10 00	7 00
Silk:			
Untwisted, all colors, with weight of papers	pound..	3 00	2 10
Twisted, all colors, with weight of papers	do....	5 00	3 50
Napkins:			
Cotton, gross weight	pound..	30	21
Linen or mixed, to 20 inches long	dozen..	3 00	2 10
Same, to 36 inches long	do....	4 00	2 80
Saddles:			
Ordinary, with or without accessories	each..	6 00	4 20
Medium fine	do....	20 00	14 00
Fine	do....	30 00	21 00
Envelopes, for letters, gross weight	pound..	25	17½
Solder:			
Of tin. (*See* third section of this chapter.)			
Of copper or bronze, gross weight	pound..	20	14
Hats:			
Imitation of straw or rush, without ornaments, to 22 inches circumference in the interior of the crown	dozen..	2 20	1 54
Same, with ornaments	do....	6 00	4 20
Same, of straw or any other stuff or material, without ornaments	do....	5 00	3 50
Same, with ornaments	do....	9 00	6 30
Straw or imitation, without ornaments, of more than 22 inches circumference in the interior of the crown	dozen..	6 00	4 20
Same, of whatever material, ornamented	do....	18 00	12 60
Of plush, of cotton, of vicogne or beaver, of more than 22 inches circumference in the interior of the crown	dozen..	15 00	10 50
High-crowned, cylindrical, lined with silk or imitation	do....	22 00	15 40
Felt or wool, ordinary, of more than 22 inches circumference in the interior of the crown	dozen..	6 00	4 20
Same, medium fine	do....	10 00	7 00
Same, fine	do....	15 00	10 50
Of plush, of cotton, vicogne, beaver, felt, wool, or high-crowned, cylindrical, to 22 inches circumference in the interior of the crown, half the foregoing duties, according to the class.			
Rush or jihijapa (panama), ordinary	dozen..	9 00	6 30
Same, medium fine	do....	20 00	14 00
Same, fine and superfine	do....	40 00	28 00

Articles.		Appraisement.	Duties.
T.			
Tobacco, chewing or cut for smoking	pound	$7 00	$4 90
Tea, gross weight	do	30	21
Waterproof, for cloaks	square yard	1 00	70
Cruppers, for saddles or pack-saddles	dozen	5 00	3 50
Forks:			
Of turned iron or pewter	gross	3 00	2 10
White or galvanized metal, with weight of packings	pound	5 00	3 50
Velvet or shag, of wool or cotton mixed, to 30 inches wide	yard	1 00	70
Silk, pure or mixed, plain or worked, to 30 inches wide	do	1 50	1 05
Cotton, ordinary, to 26 inches wide	do	30	21
Same, fine	do	60	42
Shears, scissors of iron, cast, wrought, or steel, gross weight	pound	20	14
Ink:			
Writing, gross weight	pound	10	07
China, in paste	do	2 00	1 40
Indelible, for marking, gross weight	do	1 50	1 05
Corkscrews:			
Iron, folding	dozen	1 00	70
Common, handles of wood, iron, bone, horn, or any other material	do	1 50	1 05
With springs	do	4 00	2 80
Suspenders:			
Cotton or thread	dozen pair	80	56
Any fabric of wool	do	1 00	70
Silk	do	6 00	4 20
Towels. (*See* letter P.)			
U.			
Grapes:			
Fresh, gross weight	pound	05	03½
Dried raisins	do	10	07
V.			
Table service of white metal, plated or gilt, excepting fine silver of $\frac{833}{1000}$ fine, with weight of packings	pound	5 00	3 50
Candles:			
Of common tallow, gross weight	pound	10	07
Purified tallow, with weight of boxes	do	20	14
Sperm, gross weight	do	30	21
Paraffine, gross weight	do	30	21
Wax, gross weight	do	70	49
Dresses, ready-made:			
For children of two years and for infants, with weight of packing	pound	6 00	4 20
Of any cotton fabric, with or without ornaments, for women	each	15 00	10 50
Of any woolen stuff, with or without ornaments, for women	do	30 00	21 00
Of any silk fabric, with or without ornaments	do	80 00	56 00
Same for misses up to twelve years, half the foregoing duties, according to class.			
Of any cotton or linen fabric, with or without ornaments, for children (boys) up to eight years	dozen	7 00	4 90
Same of woolen fabric, pure or mixed, ordinary	do	10 00	7 00
(Suits) of cloth, cassimere, or other woolen fabric, fine, for children, up to eight years	dozen	20 00	14 00
Same for boys up to sixteen years, double the foregoing duties, according to the class.			
Glasses:			
Hollow, ordinary, in domestic utensils, as cups, tumblers, demijohns, &c., gross weight	cwt	12 00	8 40
Medium and fine	do	18 00	12 60
Flat, of all colors and sizes	do	4 00	2 80
Crystals for watches	dozen	40	28
Vinegar, gross weight	pound	05	03½
Wine:			
Red, in any kind of packing	bottle	30	21
Generous, or white, in any kind of packing	do	40	28
Foaming and vermouth	do	50	35
Medicinal. (*See* third part of this section.)			
Violinettes or harmonicas, flat or in clarinet form, gross weight	pound	50	35
Vizers, of leather, for caps, kepis, &c	dozen	1 70	70
Y.			
Tinder:			
For smokers	pound	80	56
Boxes, of white or yellow metal	dozen	2 00	1 40
Anvils, of iron, gross weight	cwt	7 00	4 90
Z.			
Shoes:			
Low, calf or patent leather, for men	pair	1 50	1 05
Same, or of any other fabric, for women	do	1 00	70
Same, silk, for women	do	2 00	1 40
Or slippers, of cotton or linen thread, without embroidery or ornaments, all sizes	pair	20	14

Articles.		Appraisement.	Duties.
Shoes:			
Same, of woolen fabrics, stamped or embroidered, all sizes	pair..	$0 70	$0 49
Same, of leather, simple, and without any ornament, for men and women	do....	40	28
Same, superiors, ornamented or lined with silk	do....	1 00	70
Of rubber, with or without soles, for men and women	dozen pairs..	8 00	5 60
Same, to 22 centimeters long in the interior, for children	do....	5 00	3 50
Zinc, in plates, gross weight	cwt..	4 00	2 80

THIRD PART.

DRUGS AND MEDICINES.

ART. 20. The following drugs and medicines shall pay 70 per cent. on their appraisements:

Articles.		Appraisement.	Duties.
Oil:	A.		
Of sweet almonds	pound..	$0 30	$0 21
Of benneseed (Sesamum orientale)	do....	20	14
Cod-liver, white or black	gallon..	2 00	1 40
Cod-liver, in bottles, up to 16 ounces	dozen..	6 00	4 20
Cod-liver, in bottles, up to 9 ounces	do....	2 00	2 10
White, or of poppy seeds	gallon..	1 60	1 12
Of vanilla	do....	1 60	1 12
Caster, in bottles	dozen..	6 00	4 20
Castor, in cans or other vessels	gallon..	1 20	84
Croton	pound..	4 00	2 80
Nut, or filbert	do....	1 50	1 05
Empyreumatic	do....	30	21
Oil, essential:			
Wormwood	pound..	6 00	4 20
Bitter almond	do....	12 00	8 40
Lavender	pound..	2 50	1 75
Anise	do....	3 00	2 10
Bergamot	do....	5 00	3 50
Cinnamon, ordinary	do....	2 00	1 40
Cinnamon, of Ceylon	do....	30 00	21 00
Citron	do....	2 00	1 40
Cloves	do....	2 00	1 40
Carraway	do....	2 00	1 40
Chamomile	ounce..	2 00	1 40
Lemon or orange flowers	do....	2 00	1 40
Juniper	pound..	2 00	1 40
Fennel	do....	2 00	1 40
Jasmine	do....	3 00	2 10
Lemon	do....	2 00	1 40
Rose-geranium	ounce..	1 60	1 12
Mustard	do....	2 00	1 40
Rosemary	pound..	2 00	1 40
Rose	ounce..	5 00	3 50
"Rodio"	do....	2 00	1 40
Sage	pound..	2 00	1 40
Rue	do....	2 00	1 40
Savine	do....	2 00	1 40
Sandal citrine	ounce..	1 60	1 12
Thyme	do....	2 00	1 40
Turpentine	gallon..	1 20	84
Peppermint	pound..	3 00	2 10
Valerian	do....	20 00	14 00
Acetate:			
Ammonium	pound..	40	28
Copper	do....	30	21
Morphia	ounce..	5 00	3 50
Potassium	pound..	1 00	70
Lead	do....	25	17½
Sodium	do....	1 00	70
Zinc	do....	1 00	70
Acid:			
Acetic	pound..	20	14
Benzoic	do....	5 60	3 92
Boracic	do....	70	49
Citric, crystallized or in powder	do....	40	28
Hydrocyanic (medicinal)	do....	4 00	2 80
Phosphoric	do....	70	49
Pyrogallic or gallic	do....	12 00	8 40
Prussic, medicinal	do....	4 00	2 80
Tartaric	do....	40	28
Aconite root	do....	70	49
Poppy heads	do....	60	42
Galls, Levant or Aleppo	do....	25	17½

Articles.		Appraisement.	Duties.
Agaric:			
White	pound	$0 40	$0 28
Tinder	do	1 00	70
Water:			
Mineral, in bottles	dozen	2 00	1 40
Celeste, of Rousseau, in peculiar flasks	do	2 00	1 40
Original, of Chablé, in peculiar flasks	do	3 00	2 10
Kalidor, in flasks	do	10 00	7 00
Orange-flower, double; Barbadoes, Carmelite, the green, laurel, cherry, Florida, &c. (*See* second part of this section.)			
Spirits turpentine, in tin cans or barrels	gallon	1 20	84
White lead:			
Solid or powdered	pound	15	10½
In oil. (*See* Paints, second part.)			
Sal volatile:			
Liquid	pound	20	14
Concrete	do	20	14
Camphor:			
Murray's fluid, in flasks, up to 8 ounces, net	dozen	2 00	1 40
Purified or sublimed	pound	40	28
Copperas, or sulphate of iron, impure	cwt	4 00	2 80
Civet, or mallow seed, perfumed with musk	pound	40	28
Catheters or sounds:			
Of gum-elastic	dozen	3 00	2 10
White metal	do	9 00	6 30
Lavender flowers	pound	10	07
Red lead. (*See* second part of this section.)			
Litharge	pound	15	10½
Musk:			
Tonquin	pound	15 00	10 50
Canton	do	4 00	2 80
Aloes, socotrine or hepatic	do	50	35
Alum, or sulphate of aluminium	cwt	4 00	2 80
Hostetter's stomach bitters, in bottles or common flasks	dozen	8 00	5 60
Amber, common, yellow, white, citrine	pound	70	49
Ambergris	ounce	12 00	8 40
Ammonium:			
Carbonate of	pound	20	14
Hypophosphite of	do	6 00	4 20
Hydrochlorate, or muriate, of	do	15	10½
Angelica	do	50	35
Anise	do	10	07
Antimony:			
Crude or sulphide	pound	25	17½
Metallic, or regulus of antimony	do	30	21
Muriate of	do	1 00	70
Sulphide of	do	2 00	1 40
Tartrate of	do	1 00	70
Arsenic:			
White, or arsenious acid	pound	20	14
Yellow	do	60	42
Atropine	ounce	3 00	2 10
Assafœtida	pound	30	21
Saffron. (*See* part second of this section.)			
Sugar of milk	pound	50	35
Sulphur:			
Crude, in sticks	cwt	6 00	4 20
Flowers, or sublimated, in powder	do	10 00	7 00
Prussian blue	do	70	49
B.			
Balsam:			
Of copavia	pound	50	35
Mecca	do	2 00	1 40
Peru, black	do	1 20	84
Tolu or white	do	1 00	70
Of Pelletier	do	50	35
Of Pelquier	do	50	35
Baryto:			
Muriate or nitrate of	do	50	35
Carbonate or chlorate of	do	1 20	84
Berries of juniper or laurel	do	10	07
Bdellium, gum resin	do	20	14
Belladonna, leaves	do	10	07
Benzoin, common, paste or almonds	do	70	49
Benzine, or spirits naphtha, purified	gallon	1 00	70
Same, in flasks up to 6 ounces	dozen	2 00	1 40
Vermillion, China:			
Fine	pound	1 40	98
Ordinary	do	60	42
Bicarbonate of sodium	cwt	6 00	4 20
Same, potassium	pound	30	21
Bismuth:			
Metallic	pound	1 00	70
Subnitrate	do	4 00	2 80
Valerianate	ounce	50	35

Articles.		Appraisement.	Duties.
Pistons, of bone or rubber, for syringes	dozen	$0 60	$0 42
Bole, Armenian, for gilding	pound	20	14
Borax, refined, or borate of sodium	do	25	17½
Medicine chests, homœopathic, up to 10 vials	each	6 00	4 20
Same, to 20 vials	do	12 00	8 40
Same, up to 240 vials	do	30 00	21 00
Trusses, all kinds and sizes	dozen	10 00	7 00
Bromine	ounce	70	49
Bromide of potassium	pound	3 00	2 10
Brucine	ounce	3 00	2 10
Buchu, leaves	pound	60	42
Bulbs of colchicum	do	25	17½
C.			
Beans, St. Ignatius	pound	70	49
Cadmium, metallic and preparations	do	4 00	2 80
Chloride of lime, dry, in barrels and other packages	cwt	10 00	7 00
Calamine, impure oxide of zinc	pound	15	10½
Calamus, aromatic	do	50	35
Calomel, sublimated	do	1 00	70
Pill-boxes, wooden or paper	gross	70	49
Cantharides:			
Whole	pound	3 00	2 10
In powder	do	4 00	2 80
Cassia fistula	do	15	10½
Capsules:			
Of copaiba, Mothes, in boxes of 16 capsules	dozen boxes	2 00	1 40
Of copaiba, in boxes of 72 capsules	do	6 00	4 20
Of castor oil and turpentine, in boxes of 40 capsules	do	3 00	2 10
Of matico, in bottles, up to 72 capsules	do	9 00	6 30
Raquins, in flasks of 4 ounces, or pearls, Clertans, in flasks of 30 capsules	do	5 00	3 50
Of classes not specified, in bottles or boxes	pound	4 00	2 80
Carbonate of ammonium	do	20	14
Of lime, prepared	do	10	07
Of iron	do	25	17½
Of potassium, impure, or pearlash, for washing	do	10	07
Potassium	do	30	21
Sodium	cwt	6 00	4 20
Sodium, crystallized	pound	10	07
Sodium, calcined	do	10	07
Zinc	do	20	14
Cardamoms	do	80	36
Verdigris	do	30	21
Carmine:			
In lack	pound	2 00	1 40
Of Florence, superfine	ounce	1 20	84
Carraway seed	pound	25	17½
Bark:			
Peruvian or calisaya	pound	1 00	70
Other classes, ordinary	do	25	17½
Castoreum	ounce	60	42
Japan earth	pound	30	21
Hellebore, or white juniper, pulverized	do	40	28
Squills	do	30	21
Ergot of rye	do	50	35
Cyanide of zinc, potassium and mercury	do	80	56
Cicuta leaves	do	10	07
Cigarettes (chamico), pulmonary, in boxes of 25 cigarettes	dozen	2 00	1 40
Cinn abar. (*See* Vermilion, letter B.)			
Cinchonine	ounce	1 00	70
Citrate of magnesia, of lime, and Roger's magnesia, in ordinary bottles	doz. flasks	5 00	3 50
Of magnesia, soluble	pound	2 00	1 40
Of iron ammonium or potassium	do	6 00	4 20
Of quinine, and of iron and quinine	ounce	1 00	70
Citrate of morphia	do	4 00	2 80
Chlorate of potassium	pound	40	28
Chloroform	do	1 00	70
Cloride:			
Of calcium	cwt	10 00	7 00
Of "oxide" of sodium, in bottles	dozen bottles	4 00	2 80
Of zinc	pound	1 00	70
Of tin	do	70	49
Of gold	ounce	15 00	10 50
Labarraque's solution in ordinary bottles	dozen bottles	4 00	2 80
Cobalt:			
Crystallized	pound	30	20
Powdered	do	40	28
Copper:			
Ammoniacal	pound	2 00	1 40
Arseniate of	do	80	50
Codeine	ounce	12 00	8 40
	pound	4 00	2 80

Articles.		Appraisement.	Duties.
Colchicum root	pound	$0 25	$0 17½
Collodion	do	1 60	1 12
Colombo root	do	70	49
Cicutine or conicine	ounce	10 00	7 00
Coraline	pound	30	21
Bark of simaruba	do	60	42
Bark of medicinal trees not specified	do	20	14
Cream of tartar:			
Lumps	pound	15	10½
Powdered	do	25	17½
Soluble	do	50	35
Creasote, in any packings	do	1 50	1 05
Chalk, prepared	do	10	07
Chrysanthemum, powdered	do	80	56
Chromates of potassium, iron, lead, &c. (*See* Paints, second part of this section, letter P.)			
Cubebs	pound	50	35
Cubebipe	ounce	4 00	2 80
Lily beads for fountains	1,000	3 00	2 10
Hartshorn:			
Rasped	pound	25	17½
Calcined	do	15	10½
"Culen" flowers and leaves	do	25	17½
D.			
Datura stramonium, leaves	pound	30	21
Delphine	ounce	12 00	8 40
Dextrine	pound	50	35
"Deptoxide" of mercury	do	1 00	70
Digitalis, leaves	do	30	21
Diosma crenata (buchu)	do	80	56
Dittany of crete (marjoram)	do	20	14
Dulcamara, crude or cut	do	15	10½
E.			
Elaterium. (*See* Extract of elaterium.)			
Elemi	pound	40	28
Elesine, in ordinary bottles	dozen	2 00	1 40
Elixir, Dr. "Guilles" antiphlegmatic, in 8-ounce bottles	do	10 00	7 00
Same in 16-ounce bottles	do	20 00	14 00
Paul Gage's antiphlegmatic, in 8-ounce bottles	do	10 00	7 00
Dentifrice, in common bottles	do	3 00	2 10
Of pepsine	do	12 00	8 40
Emetine	pound	20 00	14 00
Plasters, all kinds	do	1 00	70
Scammony, virgin, of Smyrna	do	12 00	8 40
Scammony, in crackers	do	2 00	1 40
Ergotine	ounce	2 00	1 40
Essence, marvelous crowned, in 1-ounce vials	dozen	80	56
Essence. (*See* Essential oils, letter A.)			
Spatulas for pharmacists	dozen	3 00	2 10
Spirits:			
Of nitre, sweet	pound	30	21
Of ammonium (sal)	do	20	14
Of hartshorn	do	50	35
Of mindereri	do	40	28
Of rosemary	do	30	21
Of nutmeg	do	50	35
Of jasmine	do	2 50	1 25
Of occhlearia	do	60	42
Not specified	do	1 00	70
Storax	do	25	17½
Ether:			
Acetic	pound	70	49
Nitric	do	30	21
Hydrochloric concentrated	do	1 00	70
Sulphuric	do	40	28
Extract of wormwood hyoscyamus, cicuta, colocynth, digitalis, dulcamara	do	2 00	1 40
Extract of guaiac logwood	do	30	21
Extract of lettuce	pound	3 00	2 10
Or resin of jalap	do	3 00	2 10
Of opium	ounce	1 00	70
Of liquorice	pound	40	28
Of liquorice refined in lozenges	do	50	35
Of nux vomica	do	4 00	2 80
Of rhatany	do	2 00	1 40
Of valerian	do	2 00	1 40
Of quina	do	3 00	2 10
Of rhubarb	do	6 00	2 40
Of quassia	do	3 00	2 10
Not specified	do	2 00	1 40
Strychnine	ounce	4 00	

Articles.		Appraisement.	Duties
F.			
Farina	pound..	$0 15	$0 10½
Flowers of lavender	do....	10	07
Of benzoin	do....	5 60	3 92
Of mullein and of zinc	do....	1 00	70
Of mallow	do....	20	14
Of chamomile	do....	15	10½
Of elder	do....	10	07
Of linden, European	do....	30	21
Of violet	do....	40	28
Medicinal, not specified	do....	25	17½
Phosphate of sodium	do....	50	35
Phosphorus	do....	3 00	2 10
G.			
Galangal root	pound..	25	17½
Pease for fountains	1,000..	3 00	2 10
Gelatine, in leaves or fibers	pound..	80	56
Gentian root	do....	70	49
Glycerine	do....	50	35
Gum:			
Mastic	pound..	3 00	2 10
Myrrh	do....	50	35
Tragacanth and elemi	do....	40	28
Ammoniac	do....	50	35
Arabic, white, choice	do....	50	35
Arabic, ordinary	do....	25	17½
Arabic, powdered	do....	50	35
And lac assafœtida	do....	30	21
Bdellium	do....	20	14
Juniper and guaiac	do....	50	35
Scammony	do....	12 00	8 40
Euphorbia and incense	do....	25	17½
Galvano	do....	1 00	70
Gamboge, in grain	do....	60	42
Gamboge, in powder	do....	70	49
Labdanum and sagapenum	do....	1 60	1 12
Myrrh in grain	do....	60	42
Myrrh in powder	do....	80	56
Medicinal, not specified	do....	40	28
Grains of paradise	do....	30	21
H.			
Tonka bean	pound..	2 00	1 40
Mercury, concrete	do....	1 00	70
Muriatic of ammonium	do....	15	10½
Iron:			
Reduced by hydrogen	pound..	2 00	1 40
Powder	do....	50	35
Arseniate	do....	60	42
Lactate	do....	4 00	2 80
Black oxide	do....	10	07
Tartrate	do....	80	56
Valerianate	do....	5 00	3 50
Liver:			
Of sulphur	pound..	25	17½
Of antimony	do....	40	28
Thread:			
Linen for surgeons	pound..	1 00	70
Cotton for surgeons	do....	10	07
Hypophosphite of soda, lime, ammonium, iron, potassium, or any other except quinine	pound..	6 00	4 20
Leaves of borage, belladona, Spanish sage, and cicuta	do....	10	07
Of stramonium and deladera	do....	15	10½
Of hyoscyamus	do....	30	21
Of sabine and senna	do....	20	14
Medicinal, not specified	do....	25	17½
Cuttle-fish bones	do....	30	21
I.			
Injection of brou, chable, and of matico, in bottles	dozen..	8 00	5 60
Ipecacuanha in powder	pound..	2 00	1 40
Ipericon in powder	do....	25	17½
J.			
Soap, medicinal or almond, or animal for apodeldock	pound..	10	07
Jalap:			
In root	pound..	70	49
In powder	do....	1 00	70

Articles.		Appraisement.	Duties.
Jalapine	ounce	$1 60	$1 12
Yellow arsenic	pound	60	42
Gelatine of larice, or others	do	1 60	1 72
Sirups:			
Pectoral, in bottles, up to one pound	dozen	6 00	4 20
Depurative, in bottles, up to one pound	do	7 00	4 90
K.			
Kermes, mineral	pound	2 00	1 40
Kousso:			
Flores	pound	2 00	1 40
Powdered, in bottles	do	3 00	2 10
L.			
Lake, carmine. (*See* Carmines.)			
Lactate of iron	pound	4 00	2 80
Lactucarum	do	2 00	1 40
Laudanum	do	1 00	70
Milk of Antefelica of Candia, in vials	dozen	9 00	6 30
Lycopodium	pound	60	42
Liquid:			
Donavan's	pound	2 00	1 40
Burnett's, in flasks	dozen	6 00	4 20
Labarraque's	do	4 00	2 80
Linseed	cwt.	6 00	4 20
Lichen, Icelandic	pound	25	17½
Liquidambee	do	50	35
Litharge	do	15	10½
Lobelia leaves	do	1 00	70
Lupuline	do	3 00	2 10
M.			
Mace	pound	1 50	1 05
Magnesia:			
Carbonate or subcarbonate	pound	20	14
Calcined	do	60	42
Henry's, or its imitation, in 4-ounce bottles	dozen	5 00	3 50
Liquid, in bottle, up to 10 ounces	do	3 00	2 10
Magnesia, in bottles, up to 24 ounces	do	7 00	4 90
Breast pumps:			
Common, glass	dozen	7 00	4 90
Glass and rubber	do	7 00	4 90
Mechanical, or with spring	do	10 00	7 00
Manna:			
Ordinary	pound	30	21
Selected or white	do	1 00	70
Manganese:			
Carbonate	pound	6 00	4 20
Sulphate	do	6 00	4 20
Black oxide, in powder	do	10	07
Mannite	do	2 00	1 40
Butter:			
Of antimony	pound	1 00	70
Of cocoa	do	70	49
Of nutmeg	do	2 00	1 40
Blue mass	do	2 00	1 40
Davis's painkiller, in 2-ounce vials	dozen	2 40	1 68
Mechoacan	pound	10	07
Mercury, protiodide and dentiodide	ounce	50	35
Mesereon bark	pound	20	14
Red lead	do	10	07
Myrrh. (*See* Gum myrrh.)			
Morphine and its preparations not specified	ounce	4 00	2 80
Milan flies	gross	1 60	1 12
Muriate:			
Of baryta	pound	50	35
Of ammonium	do	15	10½
Of quinine	ounce	1 00	70
Coraline	pound	30	21
N.			
Narcotine	ounce	2 00	1 40
Animal or ivory black. (*See* Paints, second part of this section.)			
Nitrate:			
Of silver, crystallized	pound	16 00	11 20
Of silver, molded, lunar caustic	ounce	1 00	70
Of strontia	pound	50	35
Of bismuth	do	4 00	2 80
Of copper	do	60	42

Articles.		Appraisement.	Duties.
Nitre, sweet spirits of	pound	$0 30	$0 21
Nutmeg	do	80	56
Nux vomica	do	60	42
O.			
Ochre, or yellow earth. (*See* paints, second part of this section.)			
Odontoid, for filling teeth, in 5-ounce vials	dozen	6 00	4 20
Opium, crude	pound	6 00	4 20
Powdered	do	8 00	5 60
Liquid, or laudanum	do	1 00	70
Opodeldock, in 3-ounce vials	dozen	6 00	4 20
Orchil	pound	25	17½
Bugloss or anchusa	do	25	17½
Orleana, extract of dyeing	do	25	17½
Orpiment	do	60	42
Liquorice root	do	20	14
Liquorice root, powdered	do	30	21
Oxalate of potash, or salts of sorrel	do	60	42
Oxide:			
Of bismuth	pound	1 60	1 12
Of iron	do	10	07
Of zinc and of mercury	do	1 00	70
Of red of lead	do	10	07
P.			
Campeachy wood	cwt	4 00	2 80
Panacea, Surain's, in bottles	dozen	16 00	11 20
Panquinvagogo, purging, in bottles of 8 to 10 ounces	do	12 00	8 40
Same, emetic in tins, of 4 or 5 ounces	do	4 00	2 80
Paper:			
Filtering. (*See* second part of this section.)			
For fountains (in boxes of 10-ounce papers)	dozen	2 00	1 40
Tayard's chemical, in small rolls	do	2 00	1 40
Plasters, porous	do	1 00	70
Paste:			
Pectoral, in boxes to 4 ounces	dozen	3 00	2 10
Jujube	pound	50	35
Lozenges:			
Vermifuge of santonine, boxes or bottles	pound	2 00	1 40
Ipecacuanha, gum, mallow, sulphur, tolu, and vichi	do	1 00	70
Paullinia, powdered, in boxes	dozen	6 00	4 20
St. Ignatius beans	pound	1 00	70
Pearls of ether, in cases of 30 pearls	dozen	5 00	3 50
Same, in cases of 60 pearls	do	10 00	7 00
Pearls, Kemp's liquid for the face, in vials	do	5 00	3 50
Pitch:			
Burgundy	pound	10	07
Castillian	cwt	6 00	4 20
Nipples of cows teat for breast pumps	dozen	1 00	70
Nipples, rubber	do	60	42
Stone:			
Alum	cwt	4 00	2 80
Infernal (lunar caustic)	ounce	1 00	70
Blue (sulph, coppers)	pound	10	07
Rotten	do	10	07
Pumice	cwt	6 00	4 20
Pills:			
Brandreth's, in boxes of 25 pills	dozen	1 00	70
Frank's, in boxes of 25 pills	do	3 20	2 24
Holloway's or Morrison's, in boxes up to 48 pills	do	2 40	1 68
Same, up to 12 dozen	do	7 00	4 90
Same, up to 24 dozen	do	12 00	8 40
Vallet's, up to 3 dozen pills	do	4 80	3 36
Vallet's, up to 6 dozen pills	do	10 00	7 00
Blanchard's, to 50 pills	do	4 00	2 80
Kemp's, to 30 pills	do	2 00	1 40
Bristol's	do	1 00	70
Or boluses, Dr. Albret's, of turpentine, in ordinary boxes	do	7 00	4 90
Of any substance not specified	pound	4 00	2 80
Pill machine, up to 24 grooves	dozen	25 00	17 50
Piperine	ounce	70	49
Pectoral, Anacahuita, in vials	dozen	5 00	3 50
Plumbago, or black lead	cwt	6 00	4 20
Powders:			
Mahogany or red ochre	cwt	4 00	2 80
Red lead	pound	10	07
Antimonial	do	60	42
Rice and violet	do	80	56
Rice unmixed	do	25	17½
Blue, or ultramarine	do	70	49
Squills	do	40	28

Articles.		Appraisement.	Duties.
Red precipitate	pound	$1 00	$0 70
Lopez's, in bottles to 5 ounces	dozen	3 00	2 10
For killing insects	pound	80	56
Chable, mineral, in packets if they come in powder, and in bottles if in liquid, for baths	dozen	1 00	70
Rogers', in bottles	do	5 00	3 50
Violet	pound	50	35
Potash:			
Impure	pound	30	21
Caustic, purified	do	70	49
Presses for corks	dozen	6 00	4 20
Preparations for mercury not given	pound	1 60	1 12
Prussiate of potassium	do	70	49
Same of iron	do	70	49
Q.			
Quinine and its preparation, not specified	ounce	1 00	70
Quinos, bitter	pound	50	35
Quassia	do	40	28
Quinoidine, purified	ounce	1 00	70
R.			
Racahout, Arabic, in ordinary bottles	dozen	7 00	4 90
Root:			
Aconite	pound	70	49
Columbo	do	70	49
Gentian, yellow	do	70	49
Angelica	do	50	35
Dittany	do	50	35
Valerian	do	50	35
Birthwort (aristolochia)	do	20	14
Arnica	do	60	42
Pellitory	do	60	42
Peony	do	60	42
Soapwort	do	60	42
Turbi	do	60	42
China	do	60	42
Contrayerva	do	1 00	70
Colchicum	do	25	17½
Galangal	do	25	17½
Florence lily	do	25	17½
Squill	do	30	21
Turmeric, whole	do	15	10½
Turmeric, powdered	do	25	17½
Jalap, whole	do	70	49
Jalap, powdered	do	1 00	70
Ipecacuanha	do	1 60	1 12
Liquorice	do	20	14
Milkwort	do	1 00	70
Ginger, white	do	40	28
Ginger, gray	do	30	21
Rhubarb, whole	do	1 60	1 12
Rhubarb, powdered	do	2 00	1 40
Rhatany	do	1 00	70
Serpentaria	do	1 00	70
Tormentil	do	30	21
Medicinal, not specified	do	30	21
Resin of jalap	ounce	20	14
Conserve:			
Antisyphilitic, "Rob-antisiflitic," in bottles up to 2 pounds	dozen	28 00	19 60
Same in bottles to 1 pound	do	12 00	8 40
Same in bottles to 8 ounces	do	3 00	2 10
Rocu, crude	pound	80	56
Rose, dried	do	20	14
Rhubarb. (*See* Root of rhubarb.)			
S.			
Salt:			
Of wormwood or tartar	pound	30	21
Of sorrel	do	60	42
Of ammoniacal	do	15	10½
Of aconite, or aconitine	ounce	25 00	17 50
Of digitalis, or digitaline	do	15 00	10 50
Of glauber	owt	10 00	7 00
Of volatile, English	pound	20	14
Of mars	do	10	07
Salts:			
Epsom	owt	4 00	2 80
Nitre	pound	25	17½
Prunella or mineral crystal	do	40	28
Rochelle	do	30	21

Articles.		Appraisement.	Duties.
Salatrou	pound	$0 30	$0 21
Salicine	ounce	80	56
Salep, Persian	pound	20	14
Sandalwood, red	do	30	21
Leeches, officinal	1,000	25 00	17 50
Dragon's blood	pound	25	17½
Santonica	do	50	35
Santonine	ounce	1 00	70
Sassafras	pound	10	07
Selenite, for hair dye, in ordinary bottles	dozen	3 00	2 10
Senna:			
Leaves	pound	20	14
Powdered	do	30	21
Simaruba bark	do	40	28
Same, powdered	do	70	49
Seed:			
Anise	pound	10	07
Caraway	do	25	17½
Cardamom	do	80	56
Coriander	do	15	10½
Lin	cwt	6 00	4 20
Lin, powdered	pound	10	07
Medicinal, not specified	do	10	07
Soda:			
Caustic, common for soap	pound	10	07
Hydro sulphate	do	1 00	70
Purging (Seidlitz, in boxes of 12 doses)	dozen boxes	3 00	2 10
Refreshing (effervescing), in boxes of 12 doses	do	2 00	1 40
Purging, in ordinary bottles	dozen bottles	5 00	3 50
Sodium, metal	ounce	5 00	3 50
Corrosive sublimate	pound	1 00	70
Sounds. (*See* Sounds, letter A.)			
Sherbets. (*See* Simple Sirups, letter J.)			
Spongiopiline	pound	2 00	1 40
Subcarbonate of magnesia, or white magnesia	do	20	14
Subnitrate of bismuth	do	4 00	2 80
Sulphate:			
Of copper	pound	10	07
Of aluminium	cwt	4 00	2 80
Of iron	do	4 00	2 80
Of magnesium	do	4 00	2 80
Of morphia	ounce	4 00	2 80
Of mercury	pound	1 00	70
Of potassium	do	20	14
Of quinine	ounce	1 00	70
Of sodium	cwt	10 00	7 00
Of zinc, white, vitriol	pound	25	17½
Sulphide of potassium	do	25	17½
Suppositories, rubber	dozen	1 00	70
T.			
Plaster:			
Court, for wounds, in sheets up to 4 inches	dozen	50	35
Sticking, ordinary	vara	25	17½
Gutta-percha, for wounds	do	1 00	70
Tannin, or tonic acid	pound	4 00	2 80
Talc, venetian, powdered	do	10	07
Tartar emetic	do	1 00	70
Plaster cloth, to 16 inches wide	vara	20	14
Plaster, cantharides, or abeepeyer, caustic	do	60	42
Sienna, natural and calcined	pound	25	17½
Hair dye, Cristodoros or Bachelors	dozen	6 00	4 20
Tincture, ethereal tonic, in bottles	do	30 00	21 00
Crowned essence, in bottles	do	30 00	21 00
Tonic, Kemp's oriental, for the hair, in bottles, ordinary	do	2 00	1 40
Trichopherus, Barry's, common bottles	do	2 00	1 40
Turnsol	pound	30	21
Turpentine:			
Purified	pound	20	14
Venice, liquid	do	50	35
Treacle, Venice	do	1 00	70
Tripoly	do	25	17½
Ear trumpets:			
Rubber, for the deaf	dozen	6 00	4 20
Tin, for the deaf	do	4 00	2 80
Metal, fine, for the deaf	do	20 00	14 00
Turpeth, mineral	pound	2 00	1 40
Tutty, prepared	do	20	14
U.			
Ultramarine:			
Fine	pound	6 00	4 20
Inferior quality	do	70	49

Articles.		Appraisement.	Duties
Unguent:			
Of cantharides	pound..	$3 00	$2 10
Mercurial	do....	1 60	1 12
Holloway's, in small box	dozen..	2 40	1 68
Holloway's, common boxes	do....	6 00	4 20
Or salve, Holloway's, in large boxes	do....	12 00	8 40
Others, not specified	pound..	60	42
V.			
Valerianate:			
Of iron	pound..	5 00	3 50
Of quinine	ounce..	1 00	70
Of zinc	do....	1 00	70
Setons, of metal or tape	dozen..	2 00	1 40
Veratrine	ounce..	4 00	2 80
Verdigris	pound..	30	21
Vermifuge, Vogler's, in vials to 2 ounces	dozen..	2 60	1 82
Cupping glasses	do....	1 00	70
Wine:			
Of colchicum, andurrian, in bottles	dozen..	12 00	8 40
Of sarsaparilla, Dr. Albret's, in bottles	do....	12 00	8 40
Of quinine, in bottles to 20 ounces	do....	20 00	14 00
Medicinal, not denominated	bottle..	50	35
Violet	pound..	40	28
Vitriol:			
White	pound..	25	17½
Blue	do....	10	07
Y.			
Herbs, medicinal, not specified	pound..	30	21
Iodine and its preparations	do....	4 80	3 36
Iodides:			
Of iron	pound..	5 00	3 50
Of sulphur	do....	5 00	3 50
Of potassium	do....	5 00	3 50
Of mercury, proto and dento	ounce..	50	35
Of lead	pound..	4 00	2 80
Of platinum	ounce..	6 00	4 20
Of gold	do....	6 00	4 20
Of zinc	pound..	5 00	3 50
Of silver	ounce..	2 00	1 40
Z.			
Sarsaparilla:			
Bull's extract of, in bottles up to 10 ounces	dozen..	6 00	4 20
Townsend's, in bottles of 10 ounces	do....	5 00	3 50
Same, in bottles to 24 ounces	do....	10 00	7 00
Bristol's, in ordinary bottles	do....	8 00	5 60
Murray's, in ordinary bottles	do....	12 00	8 40
Lanman's	do....	8 00	5 60
Corbet's sirup, in bottles up to 24 ounces	do....	5 00	3 50
Dr. Albret's, in bottles	do....	12 00	8 40

ART. 21. The appraisement by weight should be understood as net weight in the third part of this section; and if this cannot be ascertained without danger of altering the substances, the net weight given in the original invoices shall serve as the base.

SECTION 6.—*Additional articles to the foregoing sections.*

ART. 22. Articles of which the appraisement is doubtful on account of their size make, quality, or denomination, shall be appraised like articles similar to them.

ART. 23. Articles not herein specified, and which are similar to nothing given, shall pay 70 per cent. on their principal value, according to original invoices.

ART. 24. For the reduction of foreign moneys, weights and measures of merchandise, shall be observed the following

TABLE OF RELATIONS:

WEIGHTS.

The quintal contains 100 pounds, or 4 arrobas; the arroba 25 pounds; the pound 16 ounces, and the ounce 576 grains.

	Pounds.
One hundred weight, English, equals	110.500
One pound, English, equals	0.985
One kilogram equals	2.173

LIQUID MEASURES.

The bottle contains 24 ounces of distilled water.

	Bottles.
One liter equals	1.25
One gallon equals	5.00
One arroba or cantara, Spanish, equals	20.16
One azumbre equals	2.52
One cuartillo	0.63

LONGITUDINAL MEASURES.

The vara contains 36 Spanish inches.

	Varas.
One meter contains 41.94 inches, and equals	1.165
One yard contains 38.88 inches, and equals	1.080
One ana, French or Swiss, contains 50.40 inches, and equals	1.400

MONEYS.

	Pesos.	Cents.
One pound (£) sterling equals	5	0
One dollar of the United States equals	1	0
One shilling, English, equals	0	25
One franc equals	0	20
One peseta, Spanish, equals	0	20
One real de vellou equals	0	5
One florin, German, equals	0	40
One florin, Austrian, equals	0	50
One reichsmarh equals	0	25
One lira, Italian, equals	0	20
One peso, Spanish, Peruvian, Mexican, or Chilian, equals	1	0

ART. 25. Import duties shall be paid in the manner and with credit as follows:

1st. The part of the import duties which goes toward the amortization of the bonds of the public debt shall be paid without credit.

2d. Of the part which should be paid in cash, half shall be paid at the end of the two months and the other half at the end of four, without interest, counting from the date of the declaration of examination. If the cash part amounts to less than one hundred dollars it shall be paid without credit.

3d. For the cash portion referred to in the preceding article, the owner or consignees of the merchandise shall sign notes or warrants to the order of the administrator of the respective custom house.

4th. The administrators may demand further satisfaction, whenever they think proper, security, or a second signature from debtors for import duties.

ART. 26. The bonds of the public debt, demanded or accepted in payment of import duties, in whole or in part, shall be admitted when the corresponding quantity amounts to the integral value of the bond with its interest; fractions being collected in cash.

ART. 27. For the reduction of brandies to 20° Beaumé, when its proportion of alcohol may exceed this grade, the following table shall be observed:

	Bottles.
One bottle of brandy of—	
20° equals	1.00
21° equals	1.08
22° equals	1.14
23° equals	1.20
24° equals	1.24
25° equals	1.30
26° equals	1.36
27° equals	1.40
28° equals	1.44
29° equals	1.48
30° equals	1.52
31° equals	1.56
32° equals	1.59

	Bottles.
One bottle of brandy of—	
33° equals	1.64
34° equals	1.67
35° equals	1.72
36° equals	1.77
37° equals	1.78
38° equals	1.81
39° equals	1.81

SECTION 7.—*Commerce with the republics of Central America.*

ART. 28. The manufactures and natural products of Central America shall be free from all duties on their introduction into the republic.

ART. 29. Brandies are excepted paying the duty established in the second part of section 5 of this chapter, and also articles prohibited or of illicit commerce.

SECTION 8.—*Commerce with the Mexican Republic.*

ART. 30. Manufactures and natural products of the Mexican Republic, which may be introduced by way of the terrestrial frontiers, shall pay for duties of importation 25 per cent. on the appraisement of similar articles fixed in sections 4 and 5 of this chapter.

ART. 31. If there be no similar articles they shall pay 20 per cent. of the value of said articles in the market.

ART. 32. From this disposition of the preceding articles the following articles are excepted and shall pay duties as follows:

For each bottle of brandy to 20° Beaumé	$0 35
For each calf, bull, or ox, lean	1 50
For each calf, bull, or ox, fat	4 00
For each horse	2 00
For each mule	2 50
For each young mule	1 00
For each colt	1 00
For each hog, lean	25
For each hog, fat	50

For cows, calves, and mares, free.

CHAPTER 3.

STORAGE CHARGES.

ART. 33. Articles prohibited and of illicit commerce shall remain subject to the dispositions of this code.

ART. 34. Merchandise introduced into the republic may remain in the custom-houses for the term of six months, and the percentage on the principal value of the merchandise established below, shall be collected as storage dues.

For the second month, one-fourth per cent.; for the third month, one-half per cent.; for the fourth month, three-fourths per cent.; for the fift hmonth, 1 per cent.; for the sixth month, 1¼ per cent.

ART. 35. The charges referred to in the preceding article shall be cumulative so that for six months 3¾ per cent. shall be charged, and the month commenced shall be considered as concluded.

CHAPTER 4.

EXPORT DUTIES.

ART. 36. Manufactures and natural products exported by sea or land shall pay as sole duties 20 cents for each quintal, gross weight.

ART. 37. The following artcles are excepted from the dispositions of the preceding article:

1st. Baggage.
2d. Articles exported for the account of the nation.
3d. Fractions of weight not amounting to one quintal.
4th. Fruits.
5th. Horns.

ART. 38. Wood exported shall pay 1 cent for each 10 feet, board measure.

ART. 39. Manufactures or fruits of the country, whose exportation may be established in the ten years following the publication of this code, shall be exempt from the payment of export duties during the period indicated.

CHAPTER 5.

TEMPORARY DISPOSITIONS.

ART. 40. The 25 per cent. on the appraisement of additional duties, established by the decree of June 16, 1879, shall continue to be collected entire, during one year, counting from the date in which this code goes into operation. In the second year two-thirds of this shall be collected, and during the third year one-third, which being concluded the said additional duty shall be entirely extinguished.

ART. 41. The following articles are excepted from paying the 25 per cent. additional duties:

1st. The articles comprehended in the third section of the second chapter.

2d. Empty sacks, ordinary, for exporting the fruits of the country.

3d. Manufactures and natural products of the republics of Central Amerrica and hose which, coming from] the Mexican Republic, are introduced by way of the terrestrial frontiers.

APPENDIX.

Translated from decree No. 267, published in No. 377 of the official periodical of Gautemala, under date of January 16, 1882.]

ADDITIONAL ARTICLES TO THE FISCAL CODE.

ART. 1. The following articles shall pay 25 per cent. on their appraisement:

Articles.	Appraisement.	Duties.
Iron wire, ordinary, for making nails or lattice work....cwt..	$5 00	$1 25
Wheat, gross weight....do...	1 32	33

ART. 2. The following articles shall pay 70 per cent. on their appraisement:

Articles.	Appraisement.	Duties.
Oil, cocoanut, cotton-seed, and similar oils....gallon..	$0 50	$0 35
Demijohns, or large glass bottles, covered or not, gross weight....cwt..	1 00	70
Nails, iron, for shoeing horses and all other uses, gross weight....do....	6 00	4 20
Lace:		
Cotton, including weight of packing....pound..	1 50	1 05
Linen....do....	3 00	2 10
Shotguns:		
Single-barreled, breech-loading, with or without accessories....each..	10 00	7 00
Double-barreled, breech-loading, without box or accessories....do....	10 00	7 00
Same, with box and accessories....do....	20 00	14 00
Flowers, artificial, set up, with weight of cardboards and paper....pound..	2 00	1 40
Same, not set up, with weight of boards and papers....do....	80	56
Gauze, cotton, gross weight....do....	40	28
Suspenders:		
Cotton, embroidered, with weight of cardboard and paper....pound..	2 00	1 40
Linen, embroidered, with weight of cardboard and paper....do....	4 00	2 80
Syringes, glass, with weight of packings....do....	10	07
Axes, gross weight....cwt..	7 00	4 90
Lawn, cambric, percale, tarletan, &c., cotton, plain, gross weight....pound..	60	42
Paper, colored, for binding, lustrous or marbled, gross weight....cwt..	6 00	4 20
Visiting cards:		
Blank....1,000..	2 00	1 40
Inscribed....100..	1 00	70
Slates, cardboard or stone, with or without slate pencils, gross weight....pound..	05	03½
Lamps, gross weight....do....	30	21
Cord:		
Woolen, pure or mixed, with weight of cards and papers....pound..	1 00	70
Silk, pure or mixed, with weight of cardboards and papers....do....	3 00	2 10
Table ware:		
Of gilt or plated metal, or false gold or silver, net weight....pound..	2 00	1 40
Of pewter, britannic metal, or other similar, net weight....do....	50	35
DRUGS AND MEDICINES.		
Oil, cod-liver....gallon..	80	56
Same, in bottles up to 8 ounces....dozen..	1 00	70
Same, in bottles up to 16 ounces....do....	2 00	1 40
Cod-liver, with cinchona and bitter orange, Ducout's or others, in bottles up to 10 ounces....dozen..	4 00	2 80

Articles.	Appraisement.	Duties.
Oil, cod-liver, creosoted, in bottles, up to 8 ounces ..... dozen..	$5 00	$3 50
Pancreatic of cod-liver, Defresnes's or others, bottles, to 12 ounces ..... do....	6 00	4 20
Narcotic, or tranquil balsam ..... pound..	30	21
Oil, essential:		
Of melissa ..... pound..	5 00	3 50
Of cajeput ..... do....	2 50	1 75
Of bitter orange ..... do....	5 00	3 50
Of patchouli ..... ounce..	1 00	70
Of ilang-ilang ..... do....	10 00	7 00
Of cognac, pure ..... do....	1 00	70
Of pineapple, strawberry, raspberry, and similar ..... pound..	2 50	1 75
Acid:		
Carbolic or phenic ..... pound..	40	28
Hydrofluoric ..... do....	1 00	70
Oxalic ..... do....	15	10½
Salicylic ..... do....	2 50	1 75
Valerianic ..... do....	6 00	4 20
Bismuth, subnitrate ..... do....	2 00	1 40
Borax refined, or borate of sodium ..... do....	15	10½
Bromide:		
Of potassium ..... pounds..	50	35
Of sodium ..... do....	1 50	1 05
Of camphor ..... do....	5 00	3 50
Bougies, Reynal's medicinal ..... dozen..	60	42
Carbonate of potassium, impure pearlash ..... cwt..	3 00	2 10
Carbonate of sodium, crystallized ..... do....	3 00	*2 10
Cigarettes, Grimault's Indian, in boxes of 12 cigarettes ..... dozen boxes..	25	17½
Citrate of cafeine ..... ounce..	3 00	2 10
Chloral hydrate ..... pound..	1 50	1 05
Chloride of lime ..... cwt..	3 00	2 10
Codeine ..... ounce..	4 00	2 80
Isinglass ..... pound..	50	35
Cream of bismuth in vials, up to 4-ounce ..... dozen..	6 00	4 20
Diastase ..... ounce..	4 00	2 80
Elixir:		
Of cinchona, Larroche's, in bottles, up to 10-ounce ..... dozen..	5 00	3 50
Of cinchona, Larroche's, in bottles, up to 20-ounce ..... do....	9 00	6 30
Boldo's, in bottles, to 10-ounce ..... do....	6 00	4 30
Cocoa, in bottles, to 12-ounce ..... do....	4 00	2 80
Cinchona, royal, simple or ferruginous, bottles, to 10-ounce ..... do....	4 00	2 80
Jaborandi, bottles, to 4-ounce ..... do....	5 00	3 50
Plasters of thapsia, to 20 centimeters wide ..... meter..	30	21
Ergotine ..... ounce..	80	36
Extract of buchu, Helmbold's, in vials, to 4-ounce ..... dozen..	8 00	5 60
Fruit purging, or Grillon's Indian tamarined, or Julien's, boxes, to 12 fruits, dozen boxes	4 00	2 80
Glycerine ..... pound..	20	14
Japanese drops, bottles of ½-ounce ..... dozen..	3 00	2 10
Goudron:		
Guyot's, bottles, to 12-ounce ..... dozen..	3 00	2 10
Grimault's, bottles, to 12-ounce ..... do....	2 00	1 40
Confectionery, medicinal ..... pound..	4 00	2 80
Granule's, Papillard's, or others, in vials, up to 30 granules ..... dozen..	1 50	1 05
Dialyzed iron, Browai's, Grimault's, in 2-ounce vials ..... do....	5 00	3 50
Dialyzed, Wyeth's, in 4-ounce vials ..... do....	5 00	3 50
Protoxalate of iron, Girard's, in ½-ounce vials ..... do....	4 00	2 80
Perchloride of iron ..... pound..	50	35
Llera's solution of iron, in 8-ounce vials ..... dozen..	3 00	2 10
Ipecacuanha, in powder ..... pound..	1 00	70
Jalap ..... do....	40	28
Sirup, reconstructing, of lacto-phosphate of lime, hypophosphites, or of iron, vials up to 8-ounce ..... dozen..	4 00	2 80
Lactophosphate of lime ..... pound..	2 00	1 40
Hoffman's anodyne ..... do....	40	28
Liniment, Geneau's, in 10-ounce bottles ..... dozen..	10 00	7 00
Malt extract, Fromuser's, or others, in 16-ounce bottles ..... do....	8 00	5 60
Nitrate of strontium ..... pound..	20	14
Oxalate of cerium ..... do....	4 00	2 80
Pancreatine, Defresne's, in ½-ounce vials ..... dozen..	6 00	4 20
Lozenges:		
Of santouine, vermifuge ..... pound..	70	49
Of ipecacuanha, gum, mallow, sulphur, tolu, mint, and vichy ..... do....	30	21
Ayer's cherry pectoral, 4-ounce vials ..... dozen..	8 00	5 60
Pepsin:		
Powdered ..... pound..	8 00	5 60
Paste (pasta) ..... do....	10 00	7 00
Boudault's, 1-ounce vials ..... dozen..	10 00	7 00
Nipples' rubber ..... gross..	3 00	2 10
Pills, Ayer's, Indian, Jayne's, Radway's, Moffat's, in vials or boxes, to 36 pills ..... dozen ..	2 00	1 40
Powders:		
Belloe's carbon, 4-ounce vials ..... dozen..	3 00	2 10
Tarrant's seltzer aperient, in vials, to 4-ounce ..... do....	7 00	4 90

Articles.		Appraisement.	Duties.
Pomade, Galopean, vials, or gallipots of ½-ounce	dozen..	$1 50	$1 05
Prussiate of potassium	pound..	30	21
Quilaya bark, Panama	do....	15	10½
Roots:			
Aconite, Columbo, yellow, gentian, angelica, and valerian	pounds	15	10½
Arnica, pellitory, peony, saponaria, turbe, and china	do....	30	21
Rhubarb, entirte	do....	70	49
Rhubarb, powdered	do....	80	56
Ayer's remedy, fever killer, in 4-ounce vials	dozon..	8 00	5 60
Hall's Sicilian hair renovator, in 8-ounce vials	do....	6 00	4 20
Salicylate of sodium, or other substances, except quinia	pound..	3 00	2 10
Soda, caustic, ordinary	cwt..	4 00	2 80
Sozodont, Van Buskirk's, in 2-ounce vials	dozen..	6 00	4 20
Sulphide of carbon	pound..	20	14
Aniline dyes	do....	2 00	1 40
Ultramarine, fine, and ordinary	do....	20	14
Valerianate of ammonium	ounce..	1 00	70
Vaseline, or petroleum jelly, bottles, to 2-ounce	dozen..	2 00	1 40
Same, in tins, to 2-ounce	pound..	40	28
Ayer's hair vigor, in 4-ounce vials	dozen..	7 00	4 90
Wine of cinchona (quina), bottles, to 10-ounce	do....	4 00	2 80
Same, bottles, to 20-ounce	do....	6 00	4 20
Iodide of sulphur, iron, and potassium	pound..	3 00	2 10

ART 3. The appraisement expressed in the preceding article shall also serve as a basis for the appraisement of the articles which in the second and third parts of section 5, chapter 2 (Title 1, Book I), of the fiscal code, are referred to the merchandise expressed in that article.

ART. 4. The articles specified in articles 1 and 2 shall also pay the 25 per cent. on the appraisement, additional duties, in the terms expressed in article 40 of the fiscal code.

NOTE.—The 25 per cent. additional duties mentioned in the above article and in article 40 of the fiscal code is reckoned on the appraisement and not on the duties; so that the duties on an article given in the tariff at 70 per cent. are in reality 70 + 25=95 per cent. of the valuation.

In addition to this, a tax of $1 per cwt. is levied on all merchandise entering the custom-house in Guatemala City for the benefit of the municipality.

FRANK H. TITUS,
Consul.

UNITED STATES CONSULATE,
Guatemala.

NOTES.

Kerosene oil in Bombay.—Under date of May 19, Consul Farnham reports that from the 1st of January up to the date of his writing the imports of kerosene oil at Bombay, direct from New York—save 20,000 gallons received from New York via Zanzibar—amounted to 3,931,020 gallons, with a large quantity afloat at the date of writing. Of this import 2,403,220 gallons were imported in sailing vessels and 1,527,800 by steamers via the Suez Canal.

The crops in Denmark.—Our chargé d'affaires at Copenhagen writes to the Department of State, under date of August 11, 1882, that the crops in Denmark of this year's harvest are the heaviest known in the country for the last fifty years. They include hay, barley, rye, and vegetables. Wheat is less extensively grown. The aspect of the country is very striking to the traveler in the rich products about to reward the labors of the farmers. Denmark is mainly an agricultural country, and the rejoicing at the prospect of a plentiful harvest is universal among all classes of the people, all the more so that for several years past the crops were partially destroyed while ripening by wet weather. In Germany and Holland reports show that the harvests are seriously compromised by protracted rains, and that, in some of the large districts, to an amount estimated at from 50 to 70 per cent.

Indian wheat for Europe.—In transmitting his quarterly report, under date of July 3, showing the condition of American trade in Gibraltar, our consul refers to the imports into Europe of wheat from India:

> The importation of wheat from Northern India, referred to in my former reports, has considerably increased of late, and they would have been still greater had Spain opened her ports to the free importation of cereals from abroad, as was at one time fully expected.
>
> The importation of wheat raised by the cheap labor of India into Europe, by steamships through the Suez Canal, has become a novel competition against the American farmer and Russia in supplying European markets with wheat; and it must naturally exercise an influence over prices in every quarter where even a momentary demand may arise for foreign supplies.

Norwegian cod-fisheries.—Consul Gade, of Bergen, Norway, reports, under date of July 10, 1882, that the cod-fisheries along the entire Norwegian coast are finished. The catch in Finmark was during the whole season much hindered by heavy storms and cold weather, and the final result has proved to be much inferior to the preceding four or five years. Against last year's yield of 11,500,000 fish, the net result of this year is only estimated at 5,300,000, and 9,300 barrels of liver, producing, in all, 4,100 barrels of oil, of which a little more than 2,000 barrels will be exported as steam-refined, first quality. It may be noted that the codfish caught in Finmark during the last season were of the Lodde-cod species, which for the past forty years have been found exclusively off the coast of Southern Norway. It is as yet difficult to say whether this phenomenon indicates a change in the future fisheries of Finmark and a possible return of the local fisheries in that district.

The total return of the cod-fisheries in Norway for this year is estima-

ted at 43,500,000. For the preceding five years the returns were as follows:

1877	58,500,000
1878	45,000,000
1879	56,000,000
1880	65,000,000
1881	46,000,000

American grain at Bordeaux.—The amount of grain imported from the United States to Bordeaux during the year 1881 was as follows:

	Bushels.
Wheat	4,483,101
Corn	334,206
Oats	232.797

The number of vessels entered at this port from the United States during the year 1881 was—

		Tonnage.
Sailing vessels	77	57,864
Steamers	41	48,288
Total	118	106.152

Only eleven out of this number employed in carrying our productions were American. When the enormous exchange of merchandise between the United States and Bordeaux is considered, no comment could more forcibly illustrate the deplorable state of our merchant marine than the above statement.

It may be added that no American vessel has entered at this port since October 12, 1881.—(*From a report by Consul Roosevet.*)

American trade at Gibraltar.—Under date of July 3, Consul Sprague reports as follows:

In transmitting the quarterly returns and accounts of this consulate to the 30th ultimo, I beg to state that no American vessels have entered this port during the past quarter for the purpose of transacting any commercial operations, and what is still more to be deplored is the fact that all merchandise which was destined for this market of United States production has been imported direct from New York in foreign bottoms, chiefly by Italian steam and sailing vessels.

The navigation of this port during the past quarter has not undergone any change worthy of notice. One thousand three hundred and sixteen steamers of various nations entered the port, of which 1,004 were under the British flag; none, I am sorry to say, were under our flag excepting the yacht Namouna, owned by Mr. James Gordon Bennett, of New York.

The increased competition among the British, French, and Italian lines of steamers at present plying between New York and the Mediterranean has been the means of reducing the rates of freight on cargo shipped at New York for this market, but there has been no encouragement to send forward any large quantity. It has diminished the prospects of sailing vessels to be put on the berth at New York for this port, as shippers now give a decided preference to steamers for their goods, with the exception of petroleum.

Sixty-three steamers called at this port to replenish their stock of fuel, bound to ports in the United States, of which 52 were under the British flag.

The demand for low-grade flour for Portugal has ceased since harvest time has set in, and it seems the Empire of Morocco does not now require any breadstuffs from abroad, the crops of wheat and barley in that empire turning out on the whole much better than what even the cultivators of the soil ever expected. It is therefore reasonable to suppose that moderate prices will rule in Europe thoughout the year for cereals in general.

Tobacco monopoly in France.—Minister Fish, of Brussels, writes to the Department of State, under date of August 7, 1882, respecting the government monopoly of tobacco in France, as follows:

On the 1st of January, 1883, the French Government monopoly of the manufacture and sale of tobacco in France will expire, and a strenuous effort will be made b

government to continue this system of revenue. As evidence of such intention on the part of the French Government the estimated profits of the monopoly figure in the revenue of the budget for 1883, and a credit of 62,227,100 francs is asked for the working of the monopoly for next year.

Were the abolition of the monopoly possible, it would, by throwing open the French market to our growers and manufacturers, furnish a valuable increase in the demand for American tobacco, which could not fail to be a source of great profit to our trade. In Germany we have seen the failure of Prince Bismarck's long-continued and powerful efforts to establish a government monopoly. Could an equally strong opposition to the monopoly be created in France, it would inure to the benefit of American products.

The value of the French market may be estimated from the figures furnished by the monopoly. The latter gives employment to 22,225 persons (1,649 men, 20,576 women), who receive 15,285,750 francs, or about $3,000,000 per annum in wages. The consumption of tobacco has increased from 33,545,459 kilograms in 1880 to 34,181,917 kilograms in 1881, or 636,458 kilograms in a single year. The value of this consumption has increased from 336,996,588 francs in 1880 to 355,704,350 francs in 1881, an increase of 18,707,762 francs. Converting these sums into dollars we have: Consumption, 1880, $65,040,341; consumption, 1881, $68,640,939, or $3,710,588 increase in a single year. The estimated net revenue from the monopoly in 1883 is set down at about 290,000,000 francs, or $58,000,000.

The tobacco manufacturers of Switzerland, Belgium, and Germany would doubtless co-operate in trying to open the French markets, which are now practically closed against them.

The sugar crop of Porto Rico.—A report from the United States consul at San Juan is as follows:

I have the honor to submit to the Department the following information regarding the state of the sugar crop in this island, and exportation of the said produce from this port during the month of May, 1882.

The weather during the course of the month above named has been as favorable as could be desired by planters, not only for the elaboration of sugar, which went on almost uninterruptedly in all districts of the island, but also for the planting and growth of new canes for next crop. In fact, although dry weather has prevailed, occasional showers of rain have fallen sufficient to refresh the soil, thus giving the necessary strength to the growing plants.

The last sales made here, *on the wharf*, according to last Commercial Review published, have been on the basis of $4 to $4.13 per quintal for sugar, and from 17 to 32 cents for molasses, as per quality. The yield of the crop continues to be thus far quite satisfactory.

The exports from this port (in May) were as follows:

Localities.	Sugar.			Molasses.
	Bags.	Hhds	Bbls.	Puncheons.
To the United States	3,210	2,147	.....	202
For Europe, to the British Channel for orders	.....	345	54	.....
To Spain	943	70	88	.....
To British North American provinces	.....	189	20	.....
Total	4,153	2,751	162	202

The whole amountof exports to the States, as shown by the invoice-book, consist of $198,756.

I am sorry to say that of above exportations only two comparatively small invoices have been shipped by American vessels, as the Spanish and English steamers running between New York and this port, and *vice versa*, particularly those under the English flag, are getting the bulk of freight offering here for the United States exports, while, the three Spanish steamers are bringing out all the imports, provisions and produce from the States.

American trade in Brazil.—Under date of April 1, 1882, Consular Agent Comsett, of Desterro, Santa Catharina, writes as follows:

The increase of American trade is a question in which I have felt a deep interest for the past two years, and I am convinced that we have got to depend upon Americans for such a state of affairs.

Foreigners will sell an article, providing it is called for, and provided they can realize a larger per cent. therefrom than from goods of their own nationality, but to sell a brass kettle when a copper one was called for (they being out of the latter) is almost beyond their comprehension, at least I have so found it. I am sure in my own mind, let them say what they will to the contrary, there is a jealous rankling in their breasts against the American trader who comes forward to dispute their monopoly of this trade and to deflect it from its old channels, and we may feel assured that they will use every legal means in their power to check our onward march.

I learn with pleasure of the re-establishing of the Roach line of steamers from New York to Rio de Janeiro. This is a step in the right direction, but something more is necessary to sustain this enterprise than has been done up to date. We should take a lesson from the English in this matter. Direct communication has done more than aught else to the building up of their trade with the southern ports of Brazil. When the British line was started, some ten years ago, two steamers were sufficient, but since then they have been obliged to add two more steamers, one of which is devoted entirely to cargo, notwithstanding that an opposition line of three steamers has been sharing the business with them, and from every information no line has rendered better dividends.

Now, what is necessary is a coast line of steamers in connection with the ocean boats, to bring our manufactures to a people well prepared to receive them. But the flag should be retained, for the expenses of a flag-captain, as the government demands such, upon vessels under Brazilian colors, would be an offset against the extra port charges on foreign bottoms, and these are comparatively small, as but three of such payments are required in any one year. This is a point not to be lost sight of, for the flag entering port will increase the desire for and advertise American manufactures.

Now is the time for this enterprise. Give the Brazilians a chance and they will meet us more than half way, for I believe they are ready to do business in American products if the opportunity is given them direct. Let courtesy and fair dealing be our motto; we can establish profitable commercial relations, and a good market for our surplus goods. Let us not be too anxious to crowd our advanced ideas upon this people; time will accomplish all that is necessary.

This is a serious and important question, and should be well examined before it is rejected. Eminent success might not immediately follow, but there can be no doubt that no great time would be necessary to build up a good carrying trade for a line of coast boats as herein mentioned.

I hold myself ready and willing to do everything in my power to further this important business.

GERMAN EXPORTS TO

Declared at the United States Consulate General at Frankfort-on-the-Main,

Articles.	Aix-la-Chapelle.	Barmen.	Cologne.	Crefeld.
Baskets and basketware				
Brushes and hair pencils				
Bronze powder and leaf metal				
Beads and beadware				
Books, stationery, photographs, &c	$9,014 33		$1,019 08	$18,845 31
Buttons and button stuffs		$51,048 40		2,507 33
Clay (for pipes)				
China, glass, porcelain, and earthen ware	59,977 61		1,530 28	
Cotton dress goods, velvets, and furnishings				
Corsets				
Cloth	315,998 04			
Cologne water			4,700 88	
Decalcomania				
Dyes, drugs, chemicals, &c		25,553 28	60,661 82	12,532 04
Fancy goods and toys				
Fancy paper				
Glass-plate, window and mirror glass				
Glassware (hollow), watch crystals, spectacle glasses, &c				
Gold, silver, and metal paper				
Gas-burners, lava gas-tips, brass lamps				
Grape sugar and sirup			21,051 05	
Hatters' fur				
Hair, prepared and raw				
Hares' hair				
Instruments				
Jewelry and precious stones				
Kid gloves	4,536 29			
Lead pencils and lead for pencils				
Leather, hides, and skins			88,005 09	
Leather goods				
Lead, zinc, and spelter	35,238 09			
Leonic ware				
Linen, woollen, and cotton goods	2,852 15	341,102 74		1,325 76
Lithographic stones and materials				
Machinery				2,482 62
Mineral water			170,899 25	
Music, musical strings, and instruments				
Optical goods				
Oil paintings and chromos				
Platina wire and plates				
Prunes, dried fruits, nuts, land produce, &c		8,005 08		
Pins and needles	6,630 11			
Rags				
Railway rails, old and new, ironware, cutlery, &c	9,158 30	341,923 94	159,194 16	423,232 60
Seeds, plants, &c				
Slates and slate pencils				
Silk, silk goods, velvets, ribbons and braids, &c		537,141 65	231,242 21	1,193,123 61
Smokers' articles, snuff, cigars, and tobacco				
Soaps and perfumery				
Statuary and sculpture				
Sundries		4,047 19	11,056 11	561 64
Steel			36,769 22	
Tapestry and embroidery ware, laces				
Wine, brandy, beer, and liquor			26,548 73	4,062 89
Watches, clocks, and watchmen's detectors				
Total	443,404 92	1,308,822 28	762,677 88	1,658,673 20
Total for same quarter in 1881	446,350 85	893,902 62	825,912 62	893,618 22
Increase		414,919 66		765,054 98
Decrease	2,945 93		63,234 74	

FRANKFORT-ON-THE-MAIN, *June* 30, 1882.

THE UNITED STATES

and the consulates subordinate thereto, during the quarter ending June 30, 1882.

Dusseldorf.	Frankfort.	Mannheim.	Mayence.	Munich.	Nuremberg.	Sonneberg.	Stuttgart.	Total.
.....	.....	.....	.....	.....	$50,899 60	$861 61	.....	$51,761 21
.....	.....	.....	.....	.....	10,117 65	.....	.....	10,117 65
.....	.....	.....	.....	$3,678 72	100,617 35	.....	.....	104,296 07
.....	.....	.....	.....	.....	17,280 35	.....	.....	17,280 35
.....	$24,503 20	$4,465 30	$121 85	9,887 74	.....	.....	$3,934 94	71,791 75
$3,553 26	.....	.....	.....	.....	.....	.....	.....	57,108 99
.....	15,813 92	.....	.....	.....	8,212 50	.....	.....	24,026 42
.....	13,785 93	1,460 05	550 73	.....	8,944 00	210,534 04	7,194 34	303,976 98
.....	.....	14,164 45	.....	.....	.....	.....	.....	14,164 45
.....	.....	.....	.....	.....	.....	.....	108,566 27	108,566 27
.....	.....	.....	.....	.....	.....	.....	.....	315,998 04
.....	.....	.....	.....	.....	.....	.....	.....	4,700 88
.....	.....	.....	.....	.....	9,992 00	.....	.....	9,992 00
4,824 20	154,346 01	307,425 25	45,421 03	3,451 07	14,851 90	15,532 80	37,807 12	682,406 52
.....	90,413 79	18,037 30	22 10	.....	93,008 85	217,823 92	1,372 26	420,678 22
.....	.....	.....	.....	.....	31,177 65	.....	.....	31,177 65
.....	.....	1,589 90	.....	2,005 59	320,554 05	.....	.....	324,149 54
.....	9,119 53	16,400 15	.....	.....	.....	.....	.....	25,519 68
.....	.....	.....	.....	14,035 71	.....	.....	.....	14,035 71
.....	.....	.....	.....	.....	4,766 20	1,501 60	.....	6,267 80
.....	.....	.....	.....	.....	.....	.....	.....	21,051 05
.....	49,336 05	.....	.....	.....	.....	.....	.....	49,336 05
.....	11,286 44	.....	1,772 75	.....	.....	.....	.....	13,059 19
.....	31,530 25	.....	.....	.....	.....	.....	.....	31,530 25
.....	2,838 94	.....	.....	1,459 60	12,892 00	.....	153 58	17,344 12
.....	961 81	4,269 10	134,100 81	.....	2,713 90	.....	5,075 67	147,121 29
.....	.....	.....	.....	32,922 87	.....	.....	.....	37,459 16
.....	.....	.....	.....	.....	31,054 25	.....	.....	31,054 25
.....	245,884 84	249,450 75	61,930 13	5,599 85	.....	.....	1,165 63	602,026 29
.....	5,169 33	.....	.....	.....	.....	.....	.....	5,169 33
.....	12,958 74	.....	.....	.....	.....	.....	.....	48,196 83
.....	.....	.....	.....	.....	12,791 15	.....	.....	12,791 15
153,635 67	63,737 78	6,820 25	.....	.....	19,191 40	123,823 27	11,749 11	724,238 13
.....	.....	.....	.....	.....	31,271 45	.....	.....	31,271 45
982 97	1,382 86	6,996 65	4,861 52	.....	.....	.....	405 67	17,111 69
6,566 71	37,949 35	.....	10,596 05	.....	.....	.....	.....	226,011 36
.....	4,153 19	768 00	8,219 40	3,012 30	8,345 30	5,301 35	5,145 59	29,945 13
.....	.....	.....	.....	.....	4,696 95	.....	.....	4,696 95
1,587 47	1,493 45	.....	4,456 07	17,785 51	.....	.....	.....	25,322 50
.....	5,612 87	.....	.....	.....	.....	.....	.....	5,612 87
.....	54,007 24	303 00	6,392 99	.....	4,219 25	.....	6,817 67	79,745 23
.....	.....	.....	.....	.....	.....	.....	.....	6,630 11
.....	29,783 65	14,762 60	.....	.....	.....	.....	.....	44,546 25
173,415 72	1,876 63	.....	.....	1,614 13	.....	8,528 25	417 03	1,119,360 76
.....	.....	.....	.....	.....	.....	3,432 87	771 34	4,204 21
.....	.....	.....	.....	.....	2,582 30	8,828 90	.....	11,411 20
8,971 45	301 95	89,429 45	.....	.....	.....	.....	.....	2,060,210 32
.....	.....	7,136 95	10,389 50	.....	.....	7,860 34	.....	25,386 79
.....	3,084 19	.....	.....	.....	.....	.....	.....	3,084 19
.....	.....	.....	.....	2,265 28	.....	.....	.....	2,265 28
34,544 32	2,215 70	9,801 05	388 86	3,362 44	20,879 15	.....	2,716 65	89,573 11
.....	.....	.....	551 11	2,184 32	.....	.....	.....	89,504 65
.....	1,236 51	1,234 25	.....	.....	12,699 30	.....	.....	15,170 06
66 25	35,087 49	65,891 80	185,671 60	.....	10,111 30	1,075 50	1,732 69	330,248 25
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269,930 98	639,489 47	753,712 00	359,589 70	93,749 64	672,529 30	520,004 83	178,340 36	6,547,130 59
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FERDINAND VOGELER,
United States Consul-General.

Commerce of British India.—(From a report by Consul Farnham, of Bombay):

The trade of British India during the year 1881 has been on the whole profitable, and the volume of trade has increased. The manufacturing interest of India has been profitable, particularly the cotton-spinning mill interest, which has paid from 12 to 20 per cent. per annum on the capital invested, and it is believed that there is room for large increase in the cotton-spinners' interest, particularly if the mills can turn out a finer count of yarns and cloth. But even if the cotton-spinning mills go on spinning low count of yarns and cloths, it is believed that there is room for more mills. The railway in India has never done better than during the past year; further increase of railway lines is needed, and no doubt government or private enterprise will do the needful in this respect. Gold has been poured into India during the past year. Five million sterling of gold has found its way to India in 1881. This fact speaks volumes for the general prosperity of British India. As far as Bombay is concerned, it has been greatly benefited in the general prosperity, and in my last I spoke of the great increase of our exports, particularly wheat. We actually shipped 870,000 tons of wheat from India in 1881. The value of the foregoing shipments of wheat footed up to 75,626,000 rupees. Enough to fill four hundred large steamers (470,500 tons) of this wheat was shipped from Bombay. The crops are large this year, and no doubt 1882 will show increased business in British India generally, and Bombay in particular.

Wheat and rye in Belgium.—A dispatch from Mr. Fish, minister resident at Brussels, dated August 14, gives the average prices of wheat and rye in the principal markets of Belgium for the week ending August 6. There has been advance, since June, in the price of wheat of 44 cents, and in rye of 9 cents per 100 kilograms. The average price of wheat during the week ending August 6 was $31\frac{70}{100}$ francs, and of rye $21\frac{2}{100}$ francs per 100 kilograms.

Crops of Hungary.—Under date of August 10, Consul Sterne, of Budapesth, supplies the following information concerning the crops of Hungary:

Though it is too early to be enabled to furnish an exact or statistical report of the harvest of Hungary for 1882, I yet consider it in place to state at this time that I am convinced by many indications and general report that this year's harvest is extraordinarily good, both in quantity and quality; in fact the best known for years.

It is generally estimated that Hungary will have a surplus of grain for export which will be very large, and the trade has already assumed such proportions as have not been seen in many years. Wheat is now selling at $1.20 per bushel, and though this price is not at all satisfactory to the producer or speculator there seems to be a general readiness to sell, and not, as formerly, to "hold on" unreasonably for higher prices. People here think that this policy has not only been unprofitable, but also has been the cause of Hungary's declining importance as a grain factor, and it is thought that this is a favorable opportunity to regain its position by a reasonable, practical policy. In consequence Hungary is already flooding Germany with grain, and I hope that the "trade" of the United States will this year take the above facts into consideration. A few weeks ago wheat was from 10 to 15 cents lower, but the harvest reports from Germany have been so unfavorable as to cause the above advance, which I believe will also be sustained.

Rye, barley, and oats have also yielded quite well, and Indian corn promises a very large crop.

The start of grapes is also very good at present, and if the next two months will prove seasonably warm there will be plenty of wine, and of very good quality.

The only thing which has not done well is fruit, the late frosts having damaged it very much. In this line it may be of special importance to

the United States importer to know that the crop of prunes of Hungary, Bohemia, and Moravia is considered a failure, and that Bosnia and Servia promise only a fair crop.

As soon as I shall be able to obtain reliable figures on the subject of this dispatch I shall report again thereon.

DISTRESS IN ICELAND.

Some days since I took occasion to send a dispatch stating that Denmark was about harvesting the heaviest crops gathered in many years; it is now my painful duty to inform you that late accounts from Iceland leave little doubt that the inhabitants of that island are suffering for the want of the necessaries of life.

The governor of Iceland recently wrote to the Danish ministry here giving a dismal picture of the condition of the people. The following, taken in substance from a late number of the Berlingski Tidendi, the official organ of the Danish Government, is a summary of the information received:

The unexampled hard winter of 1880–'81 was followed by a cold summer, so that the hay crop of 1881 was less than half an average, and in consequence a much larger portion than usual of the sheep, and even many of the cows, had to be slaughtered in the autumn. The past winter of 1881–'82 was so stormy that the sheep and horses could not safely be turned out to graze, as is usual in the south. When so turned out they died by hundreds.

The pack-ice filled the firths in the north and lasted from April till July; it even, which is most unusual, drifted into the southern firths, so that the spring barely began by the end of June. Owing to the failure of hay and stock last year the people are too poor to buy the corn and maize which has been imported for fodder; and, moreover, their communications with the trading stations have been cut off by the bad weather. In consequence thousands of live stock have died, the lambing has failed, the milk, both of ewes and cows, on which Icelanders live so much, is lacking; the usual autumn trade in sheep, tallow, and wool, in which the people depend for money wherewith to buy imported necessaries, will fail them. At the end of April a hurricane, which lasted ten days, overwhelmed with sand-drifts many farms in the country around Hecla.

Lastly, the measles, which had not been in Iceland for thirty-six years, and which, when falling on a people not used to it, is a deadly and not a trival disease, has attacked Peykjavik, where nearly half the people are down with it and many have died, and it is now spreading over the whole country.

To relieve in some measure the distress in Iceland, subscriptions will be raised in Denmark, and also in Norway and Sweden.

The Government of Denmark has the matter of granting assistance under consideration. The Daily News, London, August 8, gives notice that subscriptions will be received at several points in England. It needs only that the fact that suffering exists among them be made known in the United States to secure for the intelligent, honest, kind-hearted Icelanders, universal sympathy, if not substantial aid.

J. P. WICKERSHAM.

LEGATION OF THE UNITED STATES,
Copenhagen, August 14, 1882.

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